A CASE STUDY : MEASURING SERVICE QUALITY OF A PRIVATE HOSPITAL USING SERVQUAL METHOD

MBA THESIS

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By
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I certify that I have read this thesis and it is fully adequate, in scope and in quality, as a thesis for the degree of Master of Business Administration.

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ABSTRACT

A CASE STUDY: MEASURING SERVICE QUALITY OF A PRIVATE HOSPITAL BY USING SERVQUAL METHOD

SİBEL BOSTANCI

M.B.A. Thesis

Supervisor: Assist. Prof. Dr. Selçuk Karabatı

For a long time definitions of quality mostly referred to the manufacturing world, not the service sector. However, today more and more leaders of service organizations are discovering that quality is a critical issue for services too. They are aware that improving service in the eyes of customers is what pays. On the other hand the measurement of service quality has been an elusive concept.

In this study Servqual method is used to measure the level of service quality of a private hospital. Servqual is a framework for understanding service quality, measuring it and diagnosing service quality problems. In fact what Servqual says is that service quality is measurable and can be improved. In this respect it is a valuable tool for service sector.

ÖZET

SERVQUAL METODUNU KULLANARAK ÖZEL BİR HASTANENİN SERVİS KALİTESİNİN ÖLÇÜMÜ

SİBEL BOSTANCI

M.B.A. Tezi

Tez Yöneticisi: Yard. Doç. Dr. Selçuk Karabatı

Kalite kavramı uzun süre hizmet sektöründen ziyade üretim sektörüyle özdeşleştirilerek kullanıldı. Günümüzde ise, hizmet sektöründe gün geçtikçe daha fazla yönetici kalitenin ne denli önemli olduğunun farkına varıyor. Artık, müşterinin gözünde kaliteyi geliştirmenin avantajlarının bilincindeler. Diğer taraftan hizmet kalitesinin ölçülebilirliği de halen tartışılan bir konu.

Bu çalışmada Servqual metodu özel bir hastanenin servis kalitesini ölçmek için kullanıldı. Servqual hizmet kalitesini anlamak ve ölçmek ve hizmet kalite problemlerini tanımlamak için hazırlanmış bir metod. Kısaca Servqual bize hizmet kalitesinin ölçülebilir ve iyileştirilebilir bir kavram olduğunu söylüyor. Bu çerçevede, Servqual hizmet sektörü için çok değerli bir araç olarak görülmektedir.

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I. INTRODUCTION AND PROBLEM DEFINITION

Evidence in both the manufacturing and the service industries indicates that quality is a key determinant of market share and return on investment as well as cost reduction (Babakus & Mangold, 1992).

For a long time, definitions of quality mostly referred to the manufacturing world, not the service sector. The idea also spread into the service industry as the understanding of quality among manufacturing firms evolved.

Modern methods of quality assurance were developed and refined mostly in manufacturing industries. The introduction and adoption of quality assurance programs in service industries has lagged behind manufacturing.

Even though the manufacturing quality assurance framework can be used in service industries they do not fit very well. Services are different and the manufacturing quality assurance systems does not address certain characteristics of services (Congram, 1993).

The conceptualization and measurement of service quality has been an elusive concept primarily because of service intangibility, the problems associated with simultaneous production and receipt of a service, and the difference between

mechanistic and humanistic quality. In 1984, Parasuraman, Zeithaml, and Berry made a substantial contribution to the understanding of the concept of service quality and the factors that influence it by identifying four "gaps' occurring in organizations that can cause quality problems. These quality problems cause a fifth gap, which is the difference between customer expectations of service and perceptions of the service actually received. The authors defined this difference as service quality and the instrument to measure service quality as SERVQUAL (J. M. Carman, 1990)

The SERVQUAL scale was developed based on a marketing perspective with the support of the Marketing Science Institute (Parasuraman, Zeithaml, and Berry 1986). Its purpose was to provide an instrument for measuring service quality that would apply across a broad range of services with minor modifications in the scale (Babakus and Mangold 1992).

Defining and measuring the quality has also been a major challenge for health care marketers. While SERVQUAL has been tested in a number of service settings, its applicability and reliability to the hospital environments remained unknown until the study of Babakus and Mangold. At the end of their study they found that SERVQUAL is reliable and valid in the hospital environment and in a variety of other service industries. They pointed out that, one of SERVQUAL's major contributions to the health care industry will be its ability to identify symptoms and provide a starting point for the examination of underlying problems that inhibit the provision of quality services (Babakus and Mangold 1992).

The measurement of patient expectations as well as perceptions provides a valuable dimension of insight into the process by which the quality of health care service is evaluated. Administrators should understand the areas in which expectations are particularly high so that the service delivery process can be tailored to meet those expectations (PZB 1985). Similarly, in order to identify and correct service quality problems quickly, administrators should understand patients' perceptions of the quality of service delivered and the manner in which expectations and perceptions are balanced.

In this study SERVQUAL method is used to measure the level of service quality of a private hospital. The aim is to use SERVQUAL as a part of a case study not to search its relevance.

II. LITERATURE REVIEW

Quality is not a value judgment. However, stating what it is not does not define what it is. In an article in the Fall 1984 Sloan Management Review, David Garvin identifies five major approaches to the definition of quality (Garvin, 1984):

1- *The transcendent or philosophic approach:* quality is "innate excellence," which, like beauty, can be understood only through exposure to objects that display its characteristics.

2- *The product-based approach:* differences in quality reflect differences in measurable attributes. Quality is precise and measurable. This implies that "more" or "higher" of some attribute is "better." There are two corollaries to this approach:

a- Higher quality can be obtained only at higher cost (attributes are considered costly to produce).

b- Quality is viewed as an inherent characteristic of goods, rather than as something ascribed to them. Because quality reflects the presence or absence of measurable product attributes, it can be assessed objectively and is based on more than preferences alone.

3- *The user-based approach:* quality lies in the eyes of the beholder. Those goods that best satisfy user wants or needs are those that consumers regard as having highest quality. This is the "fitness for use" idea. The problem is that while "user satisfaction" and quality are related, they are not the same concepts. Preferable may not be better.

4- *The manufacturing-based approach:* quality is conformance to requirements. Deviation from specifications implies a reduction in quality ("making it right the first time"). This recognizes the customer's interest in quality. A product made to spec is less likely to be poorly made and unreliable than one that is not, but the focus is internal.

5- *The value-based approach:* quality is defined in terms of costs and prices. A quality product is one that provides performance at an acceptable cost.

The manufacturing quality control model starts with quality of design- the user-based approach, and identifies the product characteristics desired by the user. Standards are then established for those characteristics (product- and value-based approach), and the product is designed to meet those standards. In production, conformance to standards is measured (manufacturing based approach) by testing and/or inspecting the output, and by monitoring the input materials and the production process. Nonstandard output is analyzed to determine the cause of failure, so that corrective action can be taken (King, 1987).

Modern methods of quality assurance were developed and refined in manufacturing industries. The introduction and adoption of quality assurance programs in service industries has lagged behind manufacturing, perhaps as much as a decade. Managers of service organizations had usually assumed that their service was acceptable if the customers did not complain frequently. Only rather recently have they realized that the quality of service can be managed as a competitive weapon (J. R. Evans 1993).

The importance of quality in services cannot be underestimated. Studies reveal that (Evans, 1993):

- The average company never hears from 96% of its unhappy customers. For every complaint received, the company has 26 customers with problems, 6 of which are serious.
- Of the customers who make complaints, more than half will do business with that organization again if their complaint is resolved. If the customer feels that the complaint was resolved quickly, this figure jumps to 95%.
- The average customer who has had a problem will tell 9 or 10 others about it. Customers who have had complaints resolved satisfactorily will tell only about 5 others.

So, service producing industries must plan for quality to ensure that high quality services are produced efficiently. Because some work processes in service producing industries are similar to those in goods-producing industries, the basic approaches to achieve high quality and productivity are similar (Kacker, 1988).

The theories and principles advocated by such quality leaders as W. Edwards Deming, Joseph M. Juran, and others are relevant not only in the manufacturing setting, but also in the service sector. Deming emphasizes that productivity increases with improvement of quality. Indeed, both high quality and high productivity result when the work processes are designed and operated optimally. The focus of improvement, therefore, must be on the design of the process and the way it is operated (Kacker, 1988).

Kracker, in his article Quality Planning for Service Industries (1988), says the following about the Juran's quality trilogy:

> "Juran's quality trilogy lists three basic methods to improve the design and operation of work processes: quality planning, quality control, and quality improvement. Quality planning is preparing a process to meet quality goals under operating conditions. Quality control is meeting quality goals during operations so that all operations are in accordance with the quality plan. Quality improvement is achieving unprecedented, superior levels of performance in the operations. The components of the quality trilogy are analogous to the three components of total quality control defined by Armand V. Feigenbaum: quality development, quality maintenance, and quality improvement.
>
> Quality control is often a prerequisite for quality improvement, but the only thing quality control itself does is maintain prevailing quality standards. Thus the primary methods for attaining unprecedented, superior levels of quality are quality planning and quality improvement."

Eventhough the above mentioned theories and principles are also relevant in the service sector, when service quality dimensions are related to the manufacturing quality assurance framework it is seen that they do not fit very well. Some work processes in service producing industries may be similar to those in goods producing industries, but mainly services are different, and the manufacturing quality assurance system does not address certain characteristics of services (King 1987). Therefore, the following aspects of the service processes need to be addressed seperately:

Services are intangible. This characteristic poses major problems for service customers. How do you, as a customer, evaluate something that you cannot taste, touch, smell, or feel? Prior to purchase, most customers seek out personal, word-of-mount recommendations because the quality of a service can only be evaluated as it is experienced- after it has been purchased (Congram & Friedman, 1991).

Intangibility poses such complex questions as these: How do you help customers understand what to expect from your service? How do you manage quality so that customers' expectations are met and they are satisfied? The answers depend on in-depth understanding of customers' perceptions of quality, and this outside-in perspective is not known in many service organizations (Congram and Friedman, 1991).

Another characteristic of *services* is that they are *produced and consumed simultaneously* (as opposed to products, which are produced first and consumed later). During the service-delivery process, customers and service providers interact, often repeatedly. Customers participate in the delivery process and have contact with several different parts of the organization (Congram and Friedman 1991). That is customers are often part of the production and delivery process. For many services, the customer is required to contribute information or effort before the service transaction can be consumed. The quality of the service delivered is influenced by that information or effort.

All these experiences color their perceptions of the organization's quality. In every interaction, service providers frequently influence customers' perceptions of quality. As a result customers know these organizations well and are aware of the degree to which quality is valued (Congram & Friedman, 1991).

From the organization's perspective, the simultaneity factor means that employees must be supported in ways that help them become sensitive to customer's

needs. In their dealings with customers, employees embody the organization's regard for quality (Congram & Friedman, 1991).

Another characteristic differentiating services is that, the production of goods is person-machine-oriented and the *production of services is person-person-oriented.* Social competence, that is, the ability to relate to and interact with the customer on a personal basis, is therefore of the greatest importance Edvardsson & Gustavsson 1988).

A related characteristic concerns the fact that, within a service organization, *no two customer-service provider interactions are alike.* Customers and service providers vary in their personalities and needs, so their interactions vary considerably, as well. As a result, it is difficult for an organization to impose rigorous quality standards on such heterogeneous interactions. And it is almost impossible when the service offered involves some degree of judgment (e.g., legal or investment banking services) (Congram & Friedman, 1991).

In addition to these major differences between goods producing and service producing industries major differences between service quality and product quality can be summarized as follows (King 1987):

1- The characteristics on which consumers base their evaluation of service may have nothing to do with the delivery of the service. Thus, some of the characteristics that should be controlled may not be the obvious ones.

2- Consumers may evaluate service as much on the way it is delivered as on the result. Therefore, behavior is a quality characteristic.

3- Customer satisfaction is largely a function of fulfilling expectations. Since image creates expectations, image is a quality characteristic.

4- Setting the service level may be difficult, since customer evaluations are global and high level, while standards must be based on measurable immediate events.

5- The service quality control system must consider the presence of the customer in the production process, producing a degree of unpredictability.

6- Techniques for measuring conformance to standards are different. Testing and inspecting may be used, but do not perform the same function.

7- Variances and acceptance ranges may not apply, due to the degree of customer risk, the inability to reject a service already rendered, and the problem of cost/benefit determination.

8- Measures of system efficiency are different: services do not generate scrap and rejects. Labor productivity and resource utilization are more relevant, especially for those services that must be performed on demand and cannot be processed in batches.

9- Many services must be performed on demand, even though conditions may not be optimal. For example, the organization may be understaffed, or experiencing peaks or valleys of customer demand. The quality control system must recognize and include standards for less-than-optimal operations as well as for the normal operating methods and procedures.

10- Customized and personalized services can be standardized- to a degree. There is usually a standard core, with a certain repertoire of variations that account for most of the customized service requirements.

11- Quality control activity may be required at times or in places where supervision and control personnel are not present.

Despite all these differences, in service sector, management often tends to evaluate service quality performance from an operations perspective simply because operations data is under their control and more readily available and they lie on the internal standards to reach high service quality. However, today more and more companies are recognizing that efforts to control quality must extend beyond internal standards and specifications to include the perspectives of customers. They are recognizing that when internal specifications for quality fail to encompass what the consumer has come to expect and/or has been shown to be possible, no amount of marketing psychology or maneuvering will succeed in turning prospects into buyers, or preventing current customers from becoming former ones. As a consequence, more and more firms are conducting customer satisfaction measurement (CSM) programs (Brandt et al.,1988).

II. 1. Three Perspectives On Quality

Corporate executives are recognizing that there is a link between quality and productivity that affects profits. In organizations of all types- both service-producing and goods-producing- management is recognizing the significance of quality improvement as a corporate strategy (Congram & Friedman, 1991).

One example is Xerox Corporation, a recipient of the Malcolm Baldrige National Quality Award. In the face of intense competition from Japanese

manufacturers of photocopy machinery, Xerox personnel looked for ways to cut costs; they found that cost cutting and quality improvement could be done simultaneously. Xerox's Chairman, David T. Kearns, described the potential of a zero-defects approach as follows: "Pretty early in the process, we realized the cost of non-conformance was 20% of revenues.... The opportunity was enormous." Although financial performance suffered in the short term, the company has regained significant market share from the Japanese. This example illustrates that quality requires the "long-haul" perspective (Congram & Friedman, 1991).

As explained before, developing and implementing a quality improvement process in a service organization is much more complex than it is in manufacturing industries. Consider the multifaceted quality service process developed by American Express and based on the strategy that "quality service...is the most powerful way we can differentiate our product in the market place." The company's quality assurance program combines a philosophy that has quality service as its core, input from customers and employees, strong management, customer service requirements that are measurable, and more than 100 programs to recognize employees and increase internal awareness of service quality. The success of American Express indicates that leaders who are serious about integrating quality into their organizations must work on several "tracks" or "levels" simultaneously, owing to quality's pervasive nature (Congram & Friedman).

Thus, there are three crucial perspectives:

1- The definition of quality

2- The customers' perspective

3- Organizing for quality

II. 1. 1. Definitions of Service Quality

Describing service quality is difficult. Generally it is intended to describe service quality in terms of experiences, especially interactions with customer-contact employees. Service quality is defined under following five headings:

The Quality Is Philosophy Definition

One commonly held view is that "quality is philosophy and it cannot be defined." Quality seems to result from management example at best and by osmosis at worst. Although a quality-minded philosophy is needed to inspire programs that promote quality, too often the attitude never leads to programs of substance (Congram & Friedman).

The Technical-Functional Definition

Gronroos proposes that service quality can be divided into two components-technical quality and functional quality. Technical quality involves what the service employee provides during the service provision process. For example, technical quality might consist of employee knowledge, technical equipment utilized, and technical solutions implemented. Functional quality refers to how the service is provided by the service employee. If focuses on interpersonal contributions made by the employee to the service encounter (Kelley and Donnelly 1990).

The Product-Attribute Definition

A third approach links quality with certain attributes of the service. This approach, posits that service quality is controlled if management establishes discrete performance standards for specific points in the service delivery process. If "helpfulness" is an important attribute to hotel customers, for example, management can develop a set of "helpful" activities (Congram & Friedman, 1991).

One of the benefits of this approach is that a service organization can use these attributes and standards in communicating with customers.

The Process-Based Definition

The premise of approaches emphasizing process is that quality permeates the service process. This approach takes into account the customer's participation in the service and the customer's perception of his or her interaction with the service provider (in addition to the service provider's perceptions) (Congram & Friedman, 1991).

The challenges management must meet in order to use a process-based framework are considerable. Measurement is one significant problem. How do you assess quality without reducing it to a set of procedures at a particular point in time? (Congram & Friedman, 1991)

An Integrated Definition

For many service companies, one of the major areas that must be addressed is the concept of quality as a moving target. That is, customers and service providers bring to the service delivery process a host of constantly changing contextual variables having differing degrees of influence on the process. As a result, the customer's expectations and definition of service quality are always changing (Congram & Friedman, 1991).

One framework, based in social psychology, focuses on the service encounter, the interaction between the customer and the service provider. These two individuals interact to achieve mutual gain and, over time, their interactions become stable, thus representing a basis for understanding quality empirically (Congram & Friedman, 1991).

By focusing on the customer-service provider encounter, service managers can acquire a great deal of knowledge about what factors are most important to customers' decisions to continue the relationship. These factors might include clients' attitudes toward and experience with the service, clients' and service providers' behaviors during meetings, or cultural influences on service providers. Once service managers understand the salient contextual elements of the service relationship, they can begin to plan and control encounter outcomes (Brandt et al., 1988).

A zero-defects approach to service should be attempted. Many service organizations accept something less than 99.44 percent as the standard, but consider this. If a 1 % error rate is accepted, it would result in (Congram & Friedman, 1991):

- More than 200,000 wrong drug prescriptions annually.
- Water that is undrinkable four days per year.
- No telephone service for almost 15 minutes every day.

As new approaches to the definition of quality are developed and as our measurement tools become more sophisticated, other approaches to the assessment of quality will evolve. outside-in perspective.

II. 2. Quality Management Models Used In Service Sector

II. 2. 1. Total Performance Management

Strategies to create excellence range from one minute actions to highly sophisticated statistical methods. Typically, those that "feel good" are implemented (and die) quickly. Other strategies have produced significant results in manufacturing, but are very hard to implement and maintain in a service environment (Lawton, 1989).

Every organization is familiar with "problems". And they are also familiar with suggestion programs, quality circles, and all types of teams to deal with those

problems. In fact, problem centered approaches abound. The hope is that once the problems are eliminated, what is left will be excellence (Lawton 1989).

To solve the measurability problem of service organization R. L. Lawton approached the situation from a different point of view. He underlined the challenge in service organizations which is to define and seek out that which is wanted, not that which must be eliminated. The way to do this is by first treating service as a tangible product. A service is generally is thought of as a verb-something intangible (therefore unmeasurable), and a continuous activity. A product, on the other hand, is a norm; it is tangible, countable, and it occurs in discrete units (Lawton, 1989). Lawton, in his article Creating a Customer Centered Culture for Service Quality, states the following::

> "If a service is viewed as an activity, we try to improve it by focusing on process and efficiency. But when we can see service as a product, we try to improve quality or effectiveness. It is the product-centered strategy that provides the key for creating a customer-centered culture. Creating such a culture, responsive to both internal and external customers, can be done with a method called Total Performance Management (TPM)."

TPM refers to both a philosophy and a system for simultaneously addressing quality, productivity, profitability, and innovation. This model has six steps (Lawton, 1989):

1. Define the product.
2. Identify customer requirements.
3. Compare product with requirements.
4. Describe the process.
5. Measure productivity, quality, and profitability.
6. Include customers in product development.

II. 2. 2. Total Quality Management (TQM)

TQM is an integrative management concept directed at continuous improvement in the quality of goods and services by involving all levels and functions of organization (J. R. Evans 1993). Health care industry has started to adopt Total Quality Management (TQM) in 1991.

TQM seeks to build quality in, not inspect for it. TQM affects the big Q- the total organization. It analyzes the systems interactions within the organization that lead to the problems. For example, if a particular hospital department has a problem, the traditional quality assurance approach is to discover what or who is at fault. However, this is only a short term solution because discovering a single person or thing that is at fault does not always solve the problem. Typically, it is a whole process that needs to be corrected (Labovitz 1991).

The TQM approach starts with the assumption that most problems are interdepartmental. No one is innocent in a complex organization: very few functions stand alone.

A critical part of the TQM approach is having the problem solving team incorporate not just decision makers, but also the people who are involved in the problem- the process owners. TQM practitioners feel the most efficient way to solve a problem is to give the people who actually deal with the process the responsibility and power to recommend and implement changes. TQM can transform employees from hired hands to hired heads (Labovitz, 1991).

II. 2. 3. Customer Window

Kaoru Ishikawa states "the first step in quality control is to know the requirements of the customer." (What Is Total Quality Control?, Ishikawa 1985) Sound advice. But how can a company be close to the customer? How can a company know the requirements of the customer? How can customer input become part of the production line? Several other questions surround this issue.

To address these questions, ARBOR, INC., suggest the use of a concept called the Customer Window- a method of identifying customers, gathering customer data, and using these data to deliver a quality product or service. The Customer Window is based on three premises (Cary et al., 1987):

1- Everyone in an organization has customers. The customer may be the ultimate user (external customer) or someone within the organization (internal customer). A customer is anyone to whom someone provides service, information, or a product..

2- Everyone- not just the marketing department- can benefit by becoming more customer oriented.

3- Quality is defined by the customer. To improve quality, find out what the customer wants but is not getting- and then, whenever possible, provide it.

The graphic shown in Figure 1 summarizes the goal of the Customer Window concept: giving customers what they want. Customer Window Grid is based on quadrant analysis, a marketer research tool. The Grid divides product features into four groups or quadrants (Cary et al., 1987):

1. The customer wants it- and gets it.
2. The customer wants it- and does not get it.
3. The customer does not wants it- and gets it.
4. The customer does not wants it- and does not get it.

The Customer Window Grid provides a concrete, visual guide for discussions about quality and the value of a product's attributes. This analysis is applicable for day-to-day decisions about internal customers, as well as for major, critical decisions related to external customers. The customer Window combines simple skills from market research, quality control, and organizational development to help any manager better communicate with customers (Cary et al., 1987).

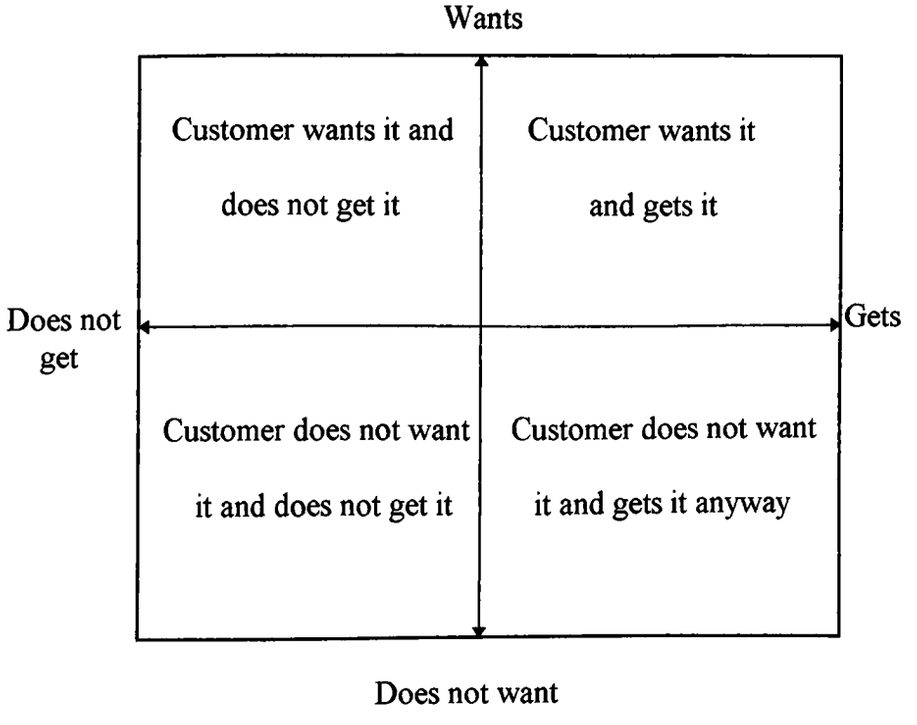

Figure 1: The Customer Window Model

Source: Cary, M., et all, "The Customer Window", Quality Progress, June 1987

III. IMPORTANCE OF SERVICE QUALITY

During the last few decades greater emphasis has been placed on quality, particularly in manufacturing. This interest in quality can be traced to the US in the 1920s and to Japan in the 1930s where there was an urgent need to develop the production process for goods. However, it was only in the 1970s that service quality came to be seen as a special field for study for a number of reasons (Edvadsson, Gustavson 1987):

- *Consumerism:* the consumer-rights movement has led today's consumers to believe they have a right to receive products and services that work.
- *Media attention:* publicity about the high quality of Japanese products has made consumers sensitive to the issue of quality.
- *Increased advertising and promotional attention:* in response to consumers' interest in quality, companies have made an attempt to focus on quality in their marketing efforts.
- *Continual technical progress:* companies have improved their ability to produce high-quality products.

A recent American Banker's Survey (1986) found that consumers rank good service first when talking about what satisfies them most about financial institutions and this information helps managers make decisions that will assure good service (Collier 1987).

Leaders of service organizations are discovering that quality is a critical but intractable element in their organizations' success. Quality is critical as a source of competitive advantage because services, in a manner similar to what is happening to tangible products, are becoming commodity-like, and, apparently, lack quality. Consumers are crying out for common courtesy and caring in service delivery. Why? Quality is interactable due, largely, to the complex nature of services. The more complex operating and delivery environment that services present begs for innovative solutions from service organization leaders (Congram and Friedman 1991).

Today's customers are more demanding than before. Time pressures on dual income households and business buyers have placed a premium on dealing with firms that do things right the first time. Larger service firms and more complex service offerings make providing high quality, personalized services almost impossible in the absence of strong quality management programs. And, probably most importantly, firms realize that it is wiser to compete on the basis of quality than price. Besides all these, it costs more to attract new customers than to retain old ones, which is why firms are beginning to invest more in research and systems to engineer in service quality than in programs to correct problems after they occur. Therefore, American corporations focus on service quality as never before (Bernhardt et all, 1988).

So, in today's world service quality and service quality improvement is very important. In their book "Delivering Quality Service" Parasuraman, Zeithaml, and Berry say: "Service managers must not forget that service excellence pays off richly.

With service excellence, everyone wins. Customers win. Employees win. Management wins. Stockholders win. Communities win. The country win." (Parasuraman, Berry & Zeithaml, 1991).

IV. THE CHALLENGE OF DIFFERENTIATING HEALTH-SERVICES THROUGH QUALITY

Where segmentation is being approached through segment management, service differentiation is a critical and difficult challenge in health care. The environmental factors of government, employer, and insurance purchasers are forcing providers to compete on price. Where differentiation by price is possible, offering discounts without compensating increases in volume simply reduces provider revenues. It is vital for providers to develop ways of effectively differentiating on the basis of service quality or place convenience, rather than on price alone (Congram and Friedman 1991).

In the article "Quality of Care" (1987) American Medical Associations state the following:

> "As government, business, and other payers search for methods to reduce their health care costs, and as competition intensifies in the health sector, efforts to preserve the quality of health care will become increasingly important. Pressure will grow for changes in delivery and financing systems that may tend to reduce the quality of care provided. Public debate will increasingly focus on how to define and measure quality, as health professionals, payers, and consumers address such issues as ensuring quality of care in contracting with provider groups; deceptiveness of advertisements stating that certain providers give "the highest quality health care available"; the feasibility of incorporating a measure of quality in reimbursing hospitals or any other health care providers; and evaluating the effectiveness of various treatment modalities and delivery systems.

> The challenge posed by this evolving health care environment is threefold: to foster a broader public understanding of what is meant by the term "high-quality medical care" and of the current mechanisms used to assess and ensure quality; to develop guidelines regarding appropriate methods for assessing or measuring the quality of care; and to encourage wide and systematic use of quality assessment findings to improve the care delivered, and thus increase overall access to care of high quality."

Unfortunately, when compared to other industries' practices, health care's current approach to quality is underdeveloped and too narrowly focused. Providers certainly do spend time and money documenting quality; they are intensely concerned that the quality of their care conform to standards because of regulatory requirements and the malpractice threat (Laffel 1990).

Quality has traditionally been an internal affair in health care. The prevailing doctrine calls for peer review, review of physician performance by other physicians.

Health service organizations face the challenge of developing quality indicators that are meaningful to each of their distinct customer constituencies and market segments. Armed with indicators that can be measured and communicated, providers can then manage their operations so as to maximize their demonstrable quality, or to stay ahead or abreast of the competition, at least in the eyes of some segments. They can then use their quality indicators in approaching prospects in order to increase their patient volume, or to protect what they already have (Congram & Friedman, 1991).

Health care organizations have an opportunity, they have four characteristics that will hasten the application of quality management science (Laffel, 1990):

- First, educational levels are very high. There will be relatively little difficulty teaching basic statistics or quality management theory to many hospital employees.
- Second, dedication to the scientific method is already ingrained in the culture of health care organizations, at least as it applies to clinical practice. Doctors are taught to observe symptoms, generate hypotheses, design treatments, and monitor results.
- Third, health care providers already possess a deep commitment to kaizen, or continuous improvement, of all aspects of patient care. Once providers recognize that quality management science has similar philosophical underpinnings and that it uses empirically tested methods, they will likely be attracted to the science and try these methods.
- Fourth, patients and payers are demanding that providers curb escalating health care costs and approach quality improvement more systematically. Providers should therefore be willing to experiment with quality management science; it is proven to meet both of these customer needs.

V. ABOUT THE HOSPITAL UNDER STUDY

Hospital management started to work on TQM in October 1994. With the start of TQM process a change process had also started. Let's now give information about the hospital and their TQM study.

This hospital is a part of a group of companies. The aim of the hospital's founders was to establish a physical facility which does not look like traditional hospitals and also that does not smell as a hospital. Because, they thought that these were the things irritating customers as soon as they enter the hospital.

The management style of the group is determined in personnel by-laws. According to this, teamwork concept is taken as the basis in management of the group. An organization in which people both love their job and each other & work in harmony is targeted. Besides, each employee is accepted as responsible from the success of the team and the work done by the unit. Each team member required to know both the goals and strategy of the team he/she is in and the goals of the whole organization. To implement this management philosophy, an organization chart is prepared.

The seven shareholders form the board of directors. Apart from that there is a Hospital Management Council that is led by the General Manager. Hospital Manager, Head doctor, Assistant Head Doctor, Head-nurse, communications group responsible are the members of this council. Hospital is managed by the Hospital Management Council. In fact, the board of directors is not effective in the management however, some strategic decisions are taken by them.

The decision taken by the Hospital Management Council are implemented by the responsible service group. However, the job descriptions, authorities and responsibilities of employees in each unit are not determined explicitly. Because of this, the employees determine their authorities and responsibilities by themselves. It is also mentioned that an informal and flexible organizational structure is accepted as more suitable at formative days of the hospital.

Quality management group of the hospital determined the following problems and deficiencies in operations. First of all, the management style targeted in personnel by-laws is observed not to be working. There are serious differences between what is aimed at and what actually happens. Participation of employees to managerial decisions is not encouraged. The members of the council and some doctors are dominating the management process. This shows that there is a gap between the concept and implementation of a team based design.

Secondly, management tried to force the limits of the capacity which affected the quality of the service in a negative way. The problem of insufficient physical

capacity was disregarded and some strategic decisions were given in a hurry. So, actions of this nature gave the employees a feeling that, more importance was given to profitability rather than quality by managers.

Mission statement of the hospital was:

"This hospital should become the first institution that its customers (patients, doctors, laboratories) are thinking to get service from when they think of health services and whether the reason is, a customer who has received service from the hospital once, will never consider getting it from another place. The employees of the hospital, who will be trained to give a service at this level, will be the core element in making the service quality of this hospital widespread in Turkey."

Considering this mission statement and the problems stated above, a need for a change in the organization emerged. In line with this thinking, managers decided to start up quality management studies. As a result they started TQM studies under the consultancy of METU group. The aim of TQM project was stated as :

- to plan TQM system for the hospital
- to give expert aid to hospital management in implementing TQM
- to help increase patient/employee content, increase competitive strength and to decrease costs

Firstly, the consultants analyzed the system of the hospital and tried to get familiar with it. For doing this, they interviewed thirty employees to get their opinions about the problems they face in their jobs and their comments on possible solutions. The aim of the system analysis study was to determine quality problems

and quality improvement needs and to find out the root causes of the stated problems. After that, they carried out pareto analysis and fishbone diagrams of the problems and then they decided on the problems which are suitable to work on. These are as follows:

- long waiting times of patients
- problems about inaccurate billing
- effective usage of bed capacity
- effective usage of policlinic rooms
- to give right laboratory diagnosis results on time
- effective usage of surgical rooms
- delays in emergency service
- employees having low moral levels
- communication problems among people and departments etc.

Consultancy group stated that the hospital has some advantages making it easier to work on TQM:

- management's strong commitment and participation
- employees being volunteer, dynamic and open to new things
- usage of high technology
- high levels of quality consciousness among employees

Besides this system analysis they organized some training programs and still they are continuing with training and will continue in the future. In addition to these they reformulate their vision and quality politics (Appendix D).

There was a missing point in determining problems to work on: customers. They started analyzing customers after that, i.e., in November 1994. For taking customers' views they prepared a questionnaire (Appendix D). They conduct it each month through telephone calls. For interpretation of the questionnaires they use a "quality multiplier" which is equal to the division of the number of patients who are totally satisfied by the total patient number. In the Table 1 results of this study for February and March are seen for different departments. It can be easily seen that overall quality multiplier decreased in March with respect to February. This gives an important message: they are not on the right way in their quality study or they made improvements but the questionnaire they use fails to measure the progress.

Table 1: Results of quality multiplier for the hospital

MONTH	FEBRUARY	MARCH
QUALITY MULTIPLIER (OVERALL VALUE)	0.90	0.87

VI. SERVQUAL - A NEW APPROACH TO SERVICE QUALITY

Up to this point quality concept, both in manufacturing and service industries, is explained and also the importance and difficulty of measuring service quality is emphasized.

In this section SERVQUAL, a methodology for measuring service quality, is explained in detail. SERVQUAL was developed by Parasuraman, Berry and Zeithaml and they give a great insight in this subject in their book "Delivering Quality Service- Balancing Customer Perceptions and Expectations" (1990).

SERVQUAL provides a structure for understanding service quality, measuring it, diagnosing service-quality problems. This model is referred as the "gaps model" because it features discrepancies or gaps that need to be closed to offer excellent service. Using this model Parasuraman, Berry and Zeithaml seek to demonstrate that service quality is a subject that one can grap hold of, understand, and do something about (Babakus & Mangold, 1992).

Parasuraman, Berry and Zeithaml[1] found that the existing literature was not rich enough to develop a comprehensive conceptual foundation for understanding

[1] For the sake of simplicity the initials (PZB) instead of full names of the authors will be used throughout this study

and improving service quality and a number of key questions remained unanswered. Therefore to seek answers to these unanswered questions and to reach to the above mentioned goals they conducted focus group interviews among users of four types of services: retail banking, credit cards, securities brokerage, and product repair and maintenance. Through the focus group interviews customers' definition of service quality is found as meeting or exceeding what customers expect from the service. So, they understood that judgement of service quality depends on the customers' expectations and perceptions and discrepancy between expectations and perceptions. SERVQUAL is developed over this understanding (Babakus & Mangold, 1992).

Second outcome of the focus group interviews is the factors influencing expectations. Focus groups suggested that several key factors might shape customers' expectations. These are (PZB, 1991):

1. *Word-of-mouth communication:* what customers hear from other customers. This is the potential determinant of expectations.

2. *Personal needs:* individuals characteristics and circumstances of customers.

3. *Past experience*

4. *External communications from service providers:* direct and indirect messages conveyed by service firms to customers.

5. *Price:* influence of price on expectations is subsumed under the general influence of external communications. This factor plays an important role in shaping expectations, particularly those of prospective customers of a service.

The next insights emerging from focus groups are the ten general criteria or dimensions of service quality that customers used in judging service quality (PZB, 1991).

Even though the specific evaluative criteria may vary from service to service, the ten general dimensions of service quality are exhaustive and appropriate for assessing quality in a broad variety of services (PZB, 1991).

In fact, this ten dimensions are not independent of one another. As will be explained latter in this section, after quantitative researches are conducted the overlapping ones are gathered together and the number of dimensions is decreased to five (PZB, 1991).

The ten dimensions of service quality and their definitions are as follows (PZB, 1991):

1. *Tangibles:* Appearance of physical facilities, equipment, personnel, and communication materials.
2. *Reliability:* Ability to perform the promised service dependably and accurately.
3. *Responsiveness:* Willingness to help customers and provide prompt service.
4. *Competence:* Possession of the required skills and knowledge to perform the service.
5. *Courtesy:* Politeness, respect, consideration, and friendliness of contact personnel.
6. *Credibility:* Trustworthiness, believability, honesty of the service provider.

7. *Security:* Freedom from danger, risk, or doubt.

8. *Access:* Approachability and ease of contact.

9. *Communication:* Keeping customers informed in language they can understand and listening to them.

10. *Understanding the Customer:* Making the effort to know customers and their needs.

Figure 2 illustrates the findings of focus group interviews.

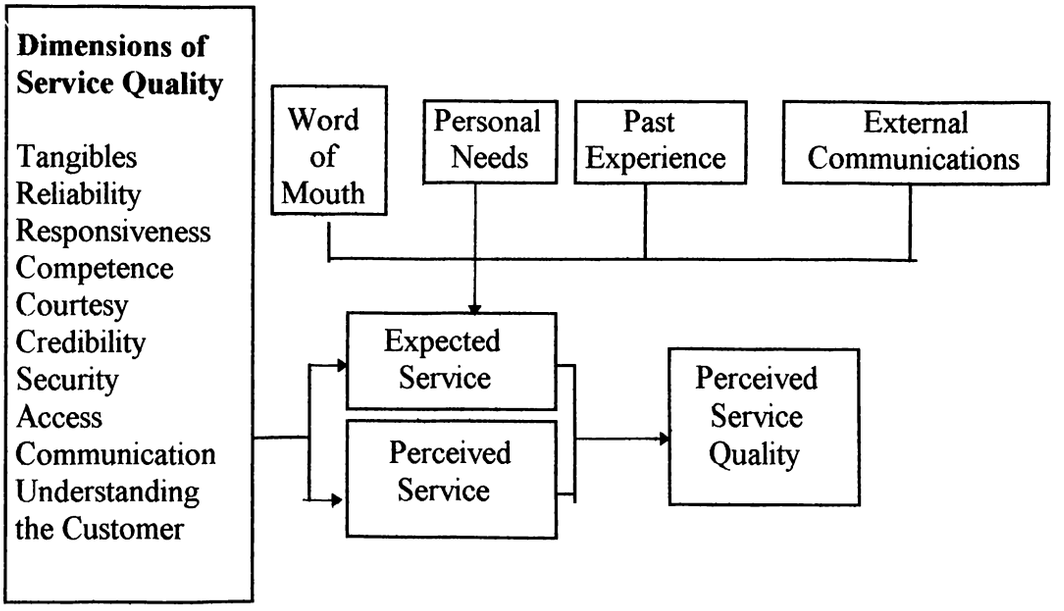

Figure 2: Findings of focus group interviews
Source: Parasuraman, A., Berry, L. L., Zeithaml, V.A., Delivering Quality Service: Balancing Customer Perceptions and Expectations, Collier Macmillan Publishers, London, 1990

Customer surveys, that is the quantitative research phase, followed the exploratory, i.e., qualitative (focus group) phase. The qualitative phase of the research yielded a definition of service quality, identified the factors that influence customers' expectations and revealed ten general dimensions that customers use in assessing service quality. The major outcome of the second phase is the

SERVQUAL- an instrument for measuring customers' perceptions of service quality (PZB, 1991).

SERVQUAL consists of two sections (PZB, 1991):

1. An expectations section containing 22 statements to ascertain the general expectations of customers concerning a service.

2. A perceptions section containing a matching set of 22 statements to measure customers' assessments of a specific firm within the service category.

The statistical analyses conducted in constructing SERVQUAL revealed considerable correlation among the ten dimensions. Therefore, the last seven dimensions are consolidated into two broader dimensions labeled as assurance and empathy. Figure 3 shows the correspondence between the original ten dimensions and SERVQUAL's five dimensions (PZB, 1991).

Last outcome of the second phase is the relative importance of the SERVQUAL dimensions. What is found is that reliability is the most critical dimension, regardless of the service being studied. The results of the studies showed that customers gives an important message to service providers: appear neat and organized, empathetic, and most of all, be reliable: do what you say you are going to do. Of course, one must not forget that the relative rankings of the dimensions as perceived by customers might change in the future (PZB, 1991).

	SERVQUAL Dimensions				
Original Ten Dimensions for Evaluating Service Quality	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Tangibles					
Reliability					
Responsiveness					
Competence Courtesy Credibility Security					
Access Communication Understanding the Customer					

Figure 3: Correspondence between SERVQUAL Dimensions and Original Ten Dimensions for Evaluating Service Quality

Source: Parasuraman, A., Berry, L. L., Zeithaml, V.A., Delivering Quality Service: Balancing Customer Perceptions and Expectations, Collier Macmillan Publishers, London, 1990

The definitions of the new two dimensions along with the three original ones that remained intact are as follows:

Tangibles	Appearance of physical facilities, equipment, personnel, and communication materials
Reliability	Ability to perform the promised service dependably and accurately
Responsiveness	Willingness to help customers and provide prompt service
Assurance	Knowledge and courtesy of employees and their ability to convey trust and confidence
Empathy	Caring, individualized attention the firm provides its customers.

VI. 1. Identifying The Causes Of Service Quality Shortfalls

Up to this point discussions are focused on assessing and understanding customers perceptions of service quality. From this point on potential causes of service quality shortfalls are discussed together with the service quality shortfall perceived by customers.

The authors, as a part of the exploratory research phase, interviewed executives from four nationally recognized companies chosen from the same four sectors in which they conducted customer focus group interviews. These interviews with executives provided information concerning potential causes of service-quality shortfalls. As a result, four key discrepancies (that they labeled them also as gap) pertaining to executive perceptions of service quality and the tasks associated with service delivery to customers are formed. These four gaps, are defined by the authors as the major causes of the service-quality gap (Gap 5) customers may perceive (i.e., the discrepancy between their expectations and perceptions) (PZB, 1991).

As a result of all these qualitative and quantitative studies the authors identified five gaps that need to be closed to reach excellence (PZB, 1991):

GAP 1:	Customers' Expectations-Management Perception Gap
GAP 2:	Management's Perception-Service Quality Specification Gap
GAP 3:	Service Quality Specifications-Service Delivery Gap
GAP 4:	Service Delivery-External Communications Gap
GAP 5:	Customers' Expectations-Perceived Service Gap

GAP 5: Customers' Expectations-Perceived Service Gap

Gap 5 represents the potential discrepancy between the expected and perceived service from the customers' standpoint. As can be seen from Figure 4 key determinants of the service expected by customers are word-of-mouth, communications, personal needs, past experience, and external communications from the service-provider (PZB, 1991).

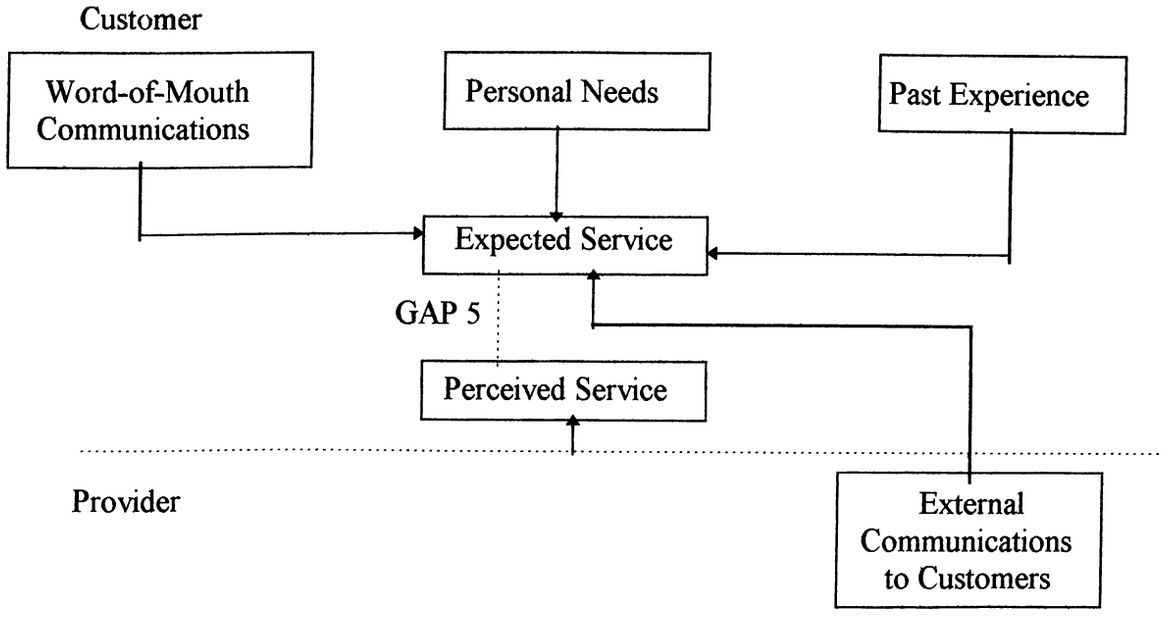

Figure 4: Key Factors Contributing to Gap 5
Source: Parasuraman, A., Berry, L. L., Zeithaml, V.A., Delivering Quality Service: Balancing Customer Perceptions and Expectations, Collier Macmillan Publishers, London, 1990

GAP 1: Customer Expectations-Management Perception Gap

The first and possibly most critical step in delivering quality service is knowing what customers expect. Knowing what customers expect is the prerequisite of providing services that customers perceive as excellent. However executives may

not always be aware of which characteristics connote high quality to customers. They may not know certain service features that are critical in meeting customers' desires. Even if they are aware of these features, they may not capture which levels of performance customers desire along them (PZB, 1991).

Being a little bit wrong about customers desires and wants can mean losing a customer's business; expending money, time, and other resources on things that do not count to customers; not surviving in a competitive market (PZB, 1991).

In order not to give bad decisions and not to make suboptimal resource allocations that result in perceptions of poor service quality executives with the authority and responsibility for setting priorities should fully understand customers' service expectations. Therefore, the necessary first step in improving quality of service, i.e., narrowing Gap 5, is to close Gap 1. This is possible through management acquiring accurate information about customers' expectations (PZB, 1991).

The authors identified three conceptual factors contributing to Gap 1. These factors are illustrated in Figure 5 and they are labeled as antecedents of Gap 1.

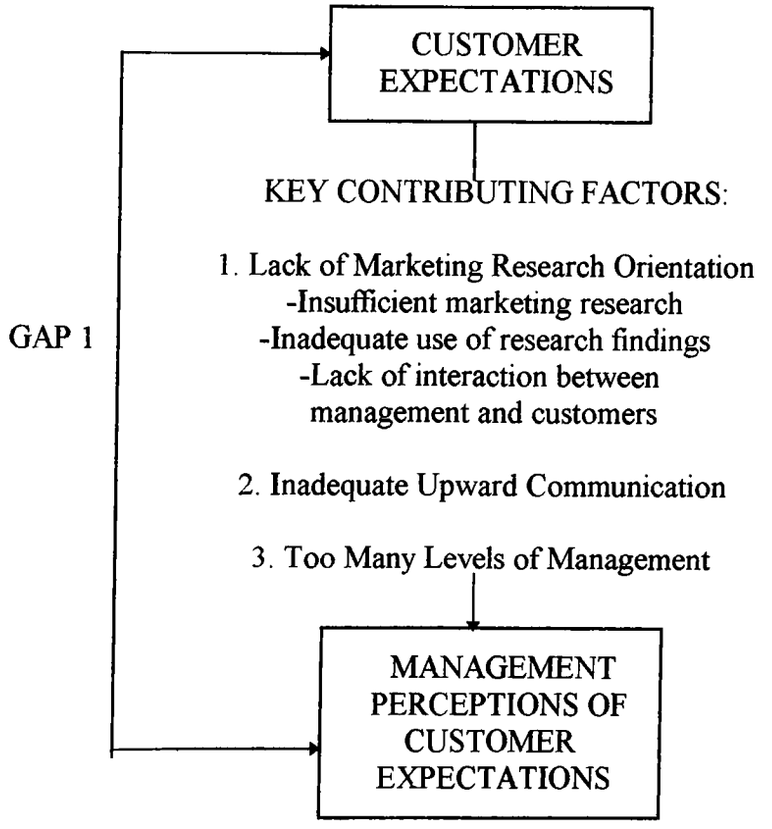

Figure 5: Key Factors Contributing to Gap 1

Source: Parasuraman, A., Berry, L. L., Zeithaml, V.A., Delivering Quality Service: Balancing Customer Perceptions and Expectations, Collier Macmillan Publishers, London, 1990

GAP 2: Management's Perception-Service Quality Specification Gap

The second step in delivering high service quality is for managers to use the information collected about customers expectations to set service quality standards for the organization. In some cases management may not be willing or able to put the systems in place to match or exceed customers' expectations (i.e., they have difficulties in translating their understanding of customers' expectations into service-quality specifications). So, the discrepancy between manager's perceptions of

customer's expectations and the actual specifications they establish for service quality is the second gap (PZB, 1991).

If Gap 2 can be closed or narrowed, this will have a favorable impact on customers' service quality perceptions. Gap 2 and its antecedents are illustrated in Figure 6. In closing Gap 2 these items should be considered.

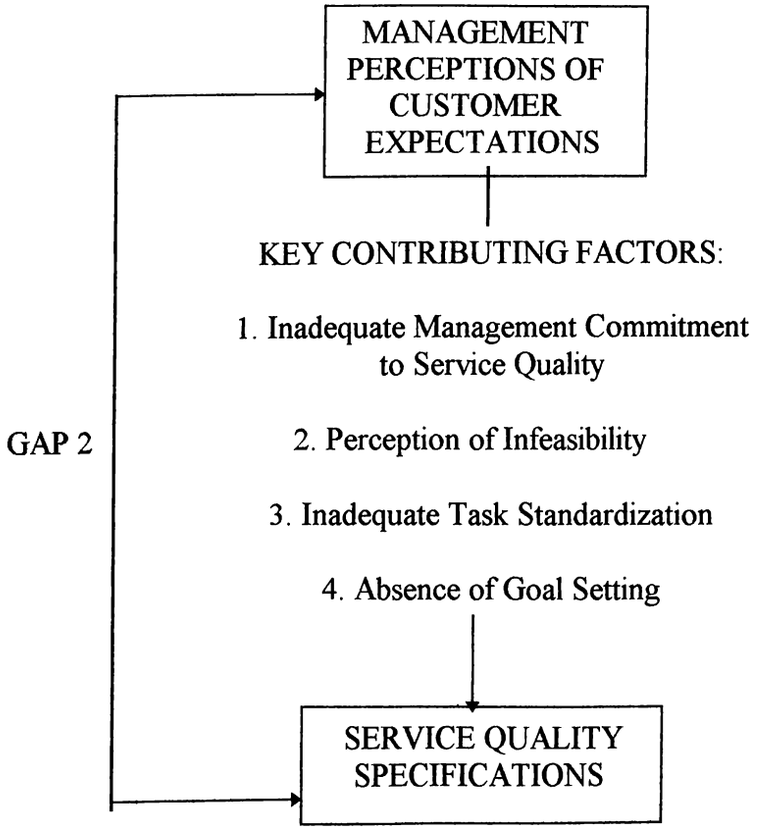

Figure 6: Key Factors Contributing to Gap 2

Source: Parasuraman, A., Berry, L. L., Zeithaml, V.A., Delivering Quality Service: Balancing Customer Perceptions and Expectations, Collier Macmillan Publishers, London, 1990

GAP 3: Service Quality Specifications-Service Delivery Gap

Service performance gap (i.e., the difference between service specifications and the actual service delivery) is common in service businesses even though the management does understand customers' expectations and does set appropriate specifications and guidelines for performing services well and treating customers correctly. That is the existence of these guidelines is not a certainty for high quality performance (PZB, 1991).

To be effective, service standards must not only reflect customers' expectations but also be backed up by adequate and appropriate resources which are people, systems and technology. Gap 3 is most vulnerable in organizations offering services that are highly interactive, labor intensive, and performed in multiple locations (PZB, 1991).

Service quality suffers when employees are unwilling or unable to perform a service at the level required. So if the level of service delivery performance falls short of standards, it falls short of what customers expect as well. This direct association between Gap 3 and Gap 5 suggests that narrowing Gap 3 will also reduce Gap 5 (PZB, 1991).

Maintaining service quality, then, depends not only on recognizing customers' desires and establishing appropriate standards but also on maintaining a work force of people both willing and able to perform at specified levels (PZB, 1991).

Conceptual factors that should be focused in narrowing Gap 3 are illustrated in Figure 7.

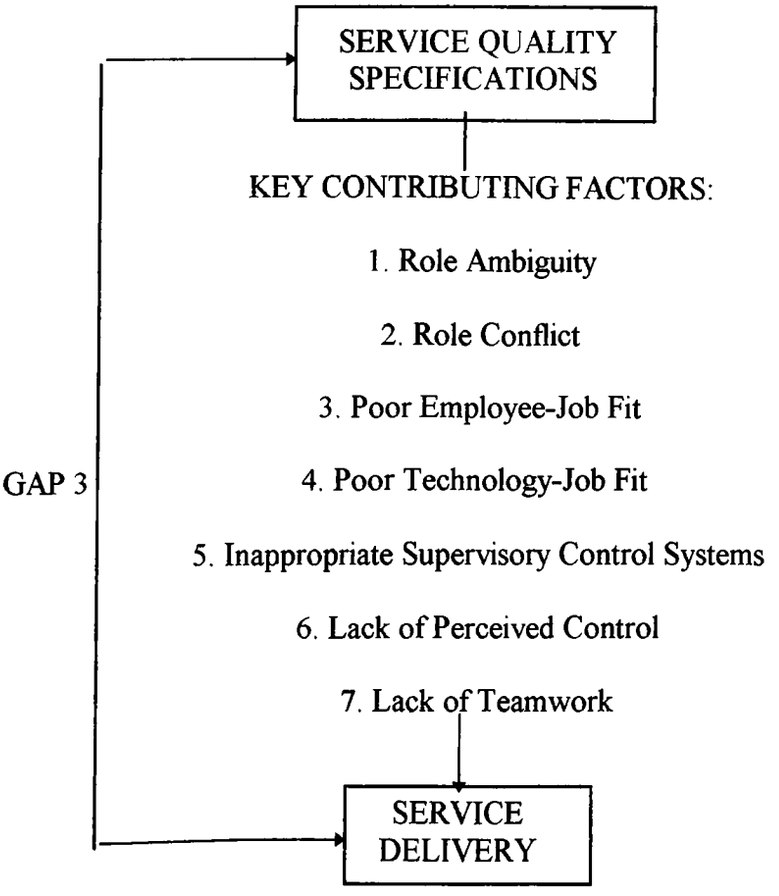

Figure 7: Key Factors Contributing to Gap 3

Source: Parasuraman, A., Berry, L. L., Zeithaml, V.A., Delivering Quality Service: Balancing Customer Perceptions and Expectations, Collier Macmillan Publishers, London, 1990

GAP 4: Service Delivery-External Communications Gap

The discrepancy between what a firm promises about a service and what it actually delivers is the fourth major cause of low service-quality perceptions. Promises made by a service company through its media advertising, sales force, and other communications affect the customers' assessment of service quality. Service

provider's external communications is a key determinant of customers' expectations. Discrepancies between service delivery and external communications (Gap 4), in the form of exaggerated and/or broken promises and/or the absence of information about service delivery aspects intended to serve customers well, can affect customers' perceptions of service quality. What is essential to delivering services that customers perceive as high in quality is the accurate and appropriate company communication (i.e., advertising, personal selling, and public relations that do not overpromise or misrepresent) (PZB, 1991).

In short, external communications can affect not only customers' expectations about a service but also customers' perceptions of the delivered service. Gap 4 adversely affect customers' assessment of service quality (Gap 5). Two key conceptual factors (illustrated in Figure 8) contribute to Gap 4. Gap 4 essentially reflects an underlying breakdown in coordination between those responsible for delivering the service and those in charge of describing and/or promoting the service to customers. When the latter group of individuals do not fully understand the reality of the actual service delivery, they are likely to make exaggerated promises or fail to communicate to customers aspects of the service intended to serve them well. The result is poor service-quality perceptions. Effectively coordinating actual service delivery with external communications, therefore, narrows Gap 4 and hence favorably affects Gap 5 as well (PZB, 1991).

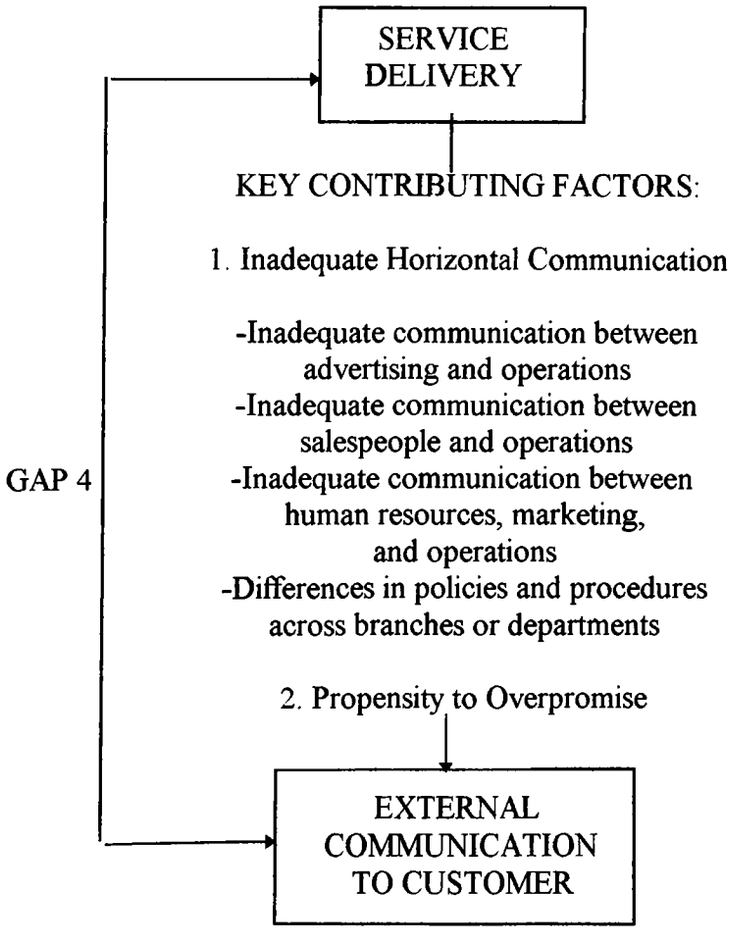

Figure 8: Key Factors Contributing to Gap 4

Source: Parasuraman, A., Berry, L. L., Zeithaml, V.A., Delivering Quality Service: Balancing Customer Perceptions and Expectations, Collier Macmillan Publishers, London, 1990

VI. 2. Complete Picture of Gaps

Thus far it is shown that the gap between customers' expectations and perceptions of service quality (Gap 5) results from the four gaps on the organizations side. Figure 9 portrays a complete picture of all these gaps showing provider's and customers' sides of the service quality equation and the linkage between the two. Figure 10 is an extended model of service quality shown in Figure 9. It illustrates the various organizational factors and their relationships to the service quality gaps (PZB, 1991).

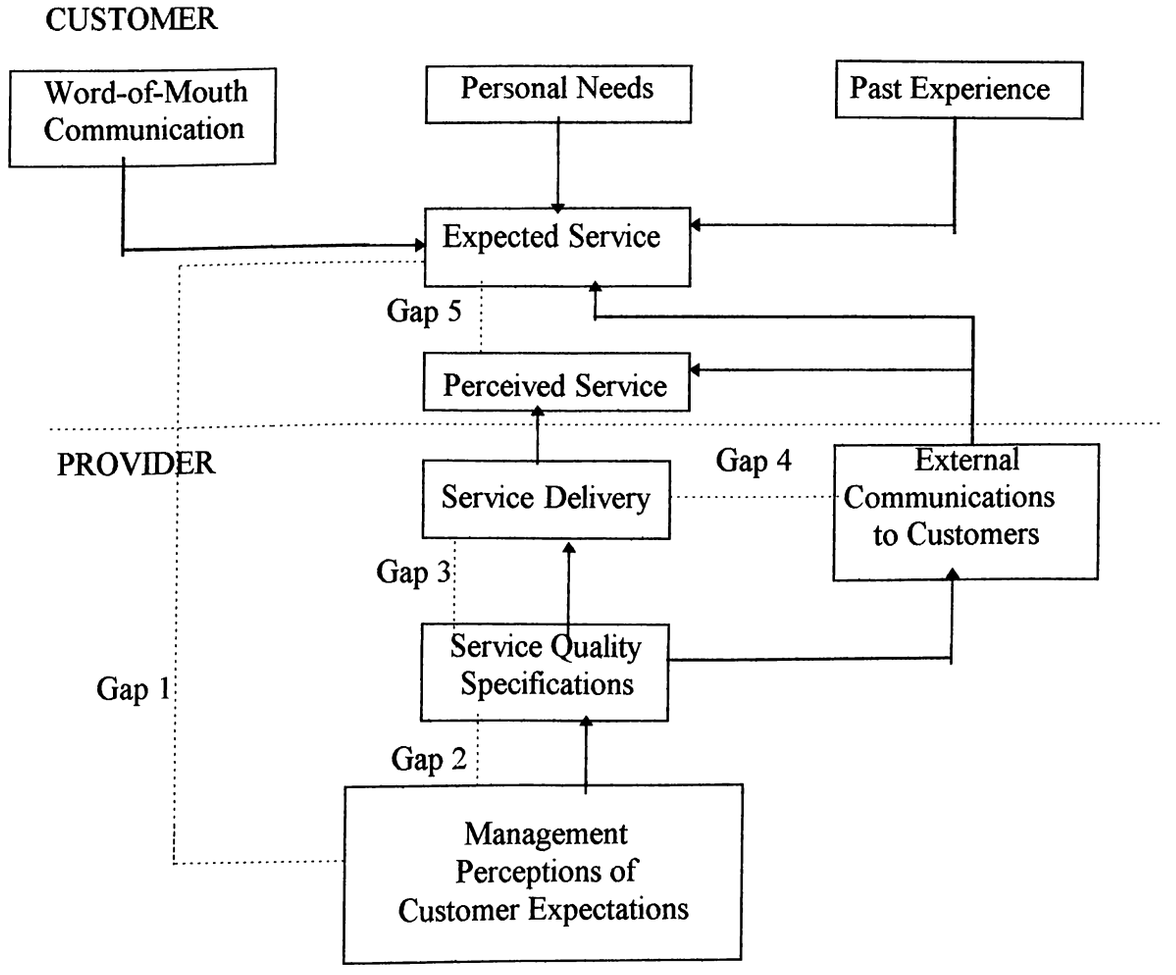

Figure 9: Conceptual Model of Service Quality

Source: Parasuraman, A., Berry, L. L., Zeithaml, V.A., Delivering Quality Service: Balancing Customer Perceptions and Expectations, Collier Macmillan Publishers, London, 1990

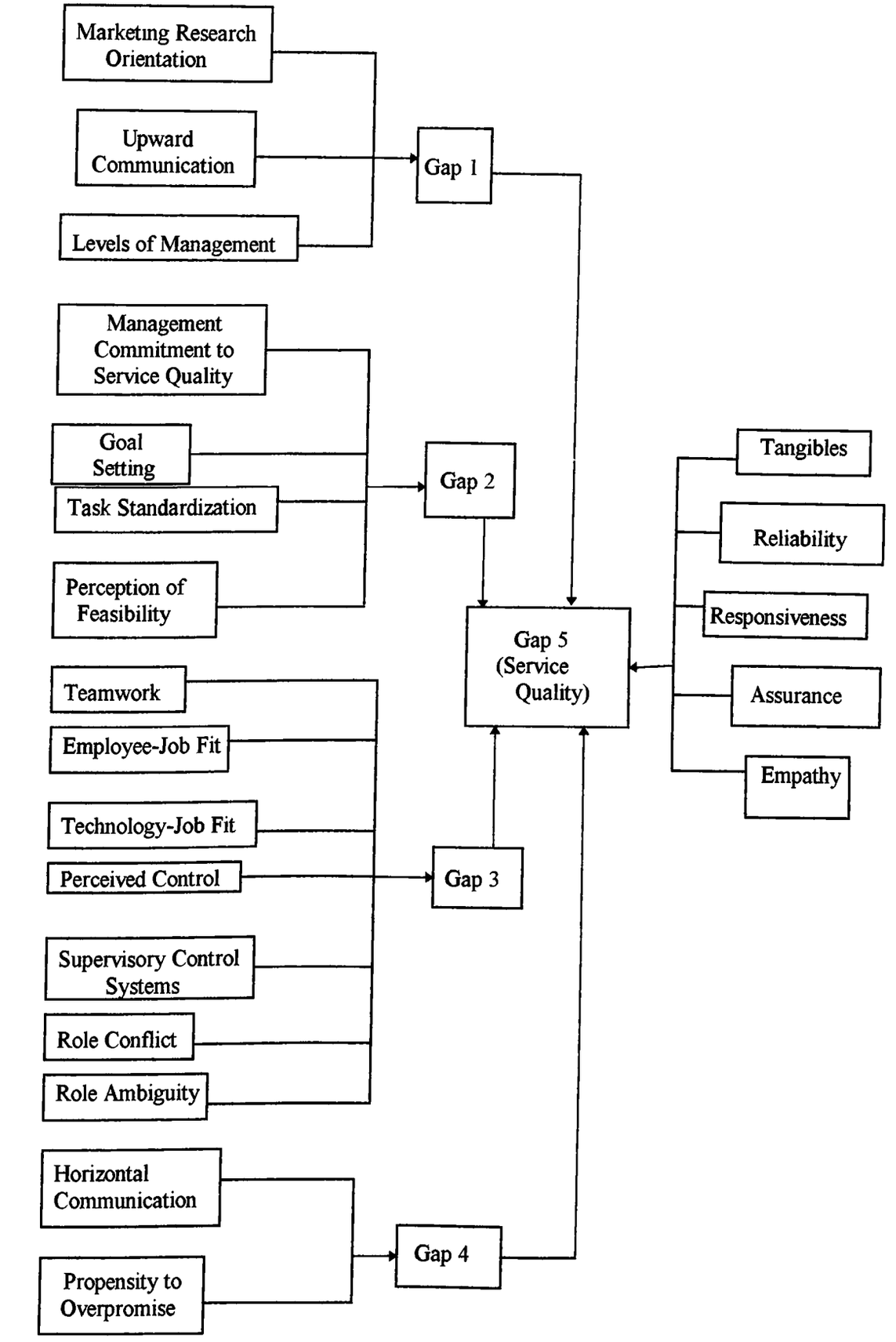

Figure 10: The Extended Gaps Model of Service Quality

Source: Parasuraman, A., Berry, L. L., Zeithaml, V.A., Delivering Quality Service: Balancing Customer Perceptions and Expectations, Collier Macmillan Publishers, London, 1990

These figures conveys a clear message to ones wishing to improve quality of service: as Gap 5 results from the four other gaps on the provider's side the key to closing Gap 5 is to close Gaps 1 through 4 and keep them closed; and these four gaps can be closed by focusing on the factors causing them (These are itemized in the left column of the Figure 10) (PZB, 1991).

The examination of the gaps in the SERVQUAL method does not only measure the overall quality of service perceived by customers, but it also identifies the key dimensions, and facets within these dimensions on which the company should focus its quality improvement efforts. SERVQUAL conceptual model works in a logical process which companies can use to measure and improve quality of service. The model's methodology is to first measure Gap 5, then to measure the other four gaps to diagnose the causes of Gap 5 (PZB, 1991).

What SERVQUAL shows us is that service is definable, is measurable and is improvable.

VI. 3. Additional Points About Servqual Applications

Gene W. Murdock, in the article called "Some Issue In Quantifying Service Quality", states the following points about gap analysis:

> "Quantifying service quality using the gaps approach had been adopted by a number of service firms and seemed theoretically sound. Measuring service quality through gap analysis implies a cognitive theory view of consumer behavior. Consumers are assumed to view services as boundles of attributes and choose those services that most closely match their desired bundle. Cognitive theory implies that service

providers need to identify the determinant attributes consumers use and deliver quality on those attributes.''

James M. Carman in his 1990 article, points out the importance of two issue in using SERVQUAL:

> "A general issue concerning wording has to do with the use of items stated in negative form. Nine of the 22 items in the PZB battery are written in this way. The reason for reverse wording is to keep the respondent alert and to avoid nay-saying or halo effects.
>
> Another issue concerns the question of how much experience the respondent should have with the service before answering the expectations battery. Presumably, expectations come mainly from past experience with similar services, but word-of-mouth and mass media also play roles. If many first-time customers use the service, such as the placement service or the hospital, expectations will not be well formed, and a seller is well advised to determine just how well formulated and how realistic the expectations of these new customers may be."

From a practical standpoint, the two parts of SERVQUAL may seem repetitive to some respondents and does increase the questionnaire's length. In their article Refinement and Reassessment of the SERVQUAL Scale (1991) PZB states that:

> "We have not encountered problems with respondents' not understanding the distinction between the parts. Moreover, managers in companies for which we have conducted SERVQUAL surveys find the gap-score format for reporting results to be of diagnostic value. Using the two-part SERVQUAL over time allows managers to track the trend in expectations as well as in perceptions. In short, based on our extensive experience with SERVQUAL, the managerial appeal and usefulness of reporting service quality shortfalls as gap scores more than compensate for the increased survey length."

In addition, PZB state the following guidelines in ensuring the most appropriate and effective use of SERVQUAL:

> "Since SERVQUAL is the basic 'skeleton' underlying service quality, it should be used in its entirety as much as possible. While minor modifications in the wording of items to adapt them to a specific setting are appropriate, deletion of

items could affect the integrity of the scale and cast doubt on whether the reduced scale fully captures service quality.

Second, context-specific items can be used to supplement SERVQUAL. However, the new items should be similar in form to existing SERVQUAL items (e.g., they should be general rather than transaction specific). Moreover, each new item, based on its content, should be classified under the most appropriate SERVQUAL dimension to facilitate computation of the average gap score for each dimension. Although items that do not fit under any of the five dimensions (e.g., items about customers' perceptions of a service's cost) may be useful to include in the survey questionnaire, such items should be treated separately in analyzing the survey data since they do not fall under the conceptual domain of service quality.

Finally, the use of SERVQUAL can fruitfully be supplemented with additional qualitative or quantitative research to uncover the causes underlying the key problem areas or gaps identified by a SERVQUAL study, SERVQUAL is a useful starting point, not the final answer, for assessing and improving service quality. (PZB, 1991)."

VII. METHODOLOGY

VII. 1. Sample

To measure Gap 5 100 questionnaires (Appendix A) were distributed and only 50 of them could be gathered (50% return rate). From those that have returned only 42 of them were valid.

Only the in-patients responded the questionnaires. It was not possible to survey neither out-patients nor the recovered ones. This is a shortcoming for this research. The ones answering the questionnaires are the first time users and that is why their answers may be biased and their expectations could not have been well formed.

Second set of questionnaires (Appendix B) are given to ten managers and eight of them returned (80% return rate).

Third set of questionnaires (Appendix C) are distributed to 130 contact personnel. 56 of them turned and 50 of them were valid.

While choosing the contact personnel as respondents certain criteria are taken into consideration: How long they have being working in the hospital?; their

experience; whether they would be sincere in answering the questionnaire; and their commitment to the work.

VII. 2. Main Study

Three different sets of questionnaires were used to measure gaps 1 through 5 and the antecedents of first four gaps.

First set of questionnaires (Appendix A) is conducted to measure Gap 5. The aim of second and third set of questionnaires are to measure gaps 1 through 4 and their antecedents. Second set (Appendix B) are filled by the managers and third set by the employees. Each of these two instruments contains the same sets of questions to ascertain the differences, if any, between managers' and contact personnel's perceptions of all four gaps. However, second one contains additional sets of statements to measure antecedents of Gap 1 and 2 which are the managerial gaps. On the other hand, because Gaps 3 and 4 pertain more to first line service employees, third set contain additional statements to measure antecedents of these two gaps.

VII. 3. Questionnaire Design

Questionnaire Prepared to Measure Gap 5 and to Survey Customers (Appendix A)

In the questionnaires seven point Likert scale is used with anchors 1 (strongly disagree) and 7 (strongly agree).

Questionnaire designed for customers contain four different sections:

1- Expectation section consisting of 22 statements

2- Assessment section: of the relative importance of the five dimensions

3- Perceptions section consisting of a matching set of company-specific statements

4- Demographics section (age, sex, job of the customer)

In both the expectations and perceptions sections statements are grouped into the five dimensions:

DIMENSION	STATEMENTS PERTAINING TO THE DIMENSION
Tangibles	Statements 1-4
Reliability	Statements 5-9
Responsiveness	Statements 10-13
Assurance	Statements 14-17
Empathy	Statements 18-22

To assess the quality of service, i.e., to find the SERVQUAL score, the ratings customers assigned to the statements are converted into perception minus expectation scores which range from +6 to -6 with more positive scores meaning

higher perceived quality and the more negative scores meaning more serious service quality shortfall in the eyes of the customer.

SERVQUAL Score = Perception Score - Expectation Score

As each of the five dimensions are represented with a different group of statements a company's service quality along each dimension can be assessed and using these SERVQUAL score for the five dimensions an overall weighted SERVQUAL score (taking into account the relative importance of the dimensions) can be obtained.

Questionnaire To Measure Gap 1

Because the measurement of Gap 1 requires a comparison of responses pertaining to expectations from two different samples, namely customers and managers, it is different from the other three service-provider gaps. Appendices B1, B2 and C1, C2 contain statements to measure Gap 1.

First section contains the same set of 22 statements with the questionnaire prepared to measure customers' expectations and perceptions. However, the anchors, this time are different: 1 (our customers would strongly disagree) and 7 (our customers would strongly agree).

Second section is prepared to measure the relative importance of the five dimensions and it is similar to the one used in customer's questionnaire.

The data generated from these sections pertain to managers' and employees' perceptions of customers' expectations and the relative importance customers attach to the five quality dimensions. The extent of Gap 1 can be measured by determining the discrepancy between the managers' ratings and the customers' ratings on the corresponding questions. The more negative the Gap 1 score, the worse the gap.

Gap 1 can also be computed for employees in the same way and then can be compared with that of managers. For this purpose in this study the instrument prepared to measure Gap 1 is also filled by the employees.

Specifically Gap 1 score can be calculated as follows:

GAP 1 Score = Average Customer Expectation Score - Average Expectation Score Perceived by the Managers (employees)

Questionnaire To Measure Gaps 2 Through 4

Gaps 2 through 4 are measured by asking, the ones participating the research, to indicate their perceptions of the extent of those gaps. For each gap, respondents used a seven-point scale to indicate the extent of the gap along each of the five service quality dimensions. On this scale higher numbers imply smaller gaps. An overall measure of each gap can be obtained by averaging the scores across the five rating scales pertaining to the gap. Statements to measure Gaps 2 through 4 are given in Appendices B3, B4, B5 and C3, C4, C5.

Questionnaire To Measure Antecedents Of Gaps 1 Through 4

All four Gaps are measured both for managers and first-line service employees to ascertain the differences, if any, between managers' and contact personnel's perceptions of all f our gaps. In fact, Gaps 1 and 2 are managerial gaps in that the key company employees to whom they pertain are managers and Gaps 3 and 4, in contrast, pertain more to first-line service employees.

To measure the extent to which antecedents of Gaps 1 through 4 are present, specific statements pertaining to the antecedents are prepared. Seven point scales, ranging from Strongly Disagree to Strongly Agree, are used to obtain the respondents' ratings. In these instruments higher scores indicate more favorable current status of the antecedents.

Last part of the questionnaire prepared for managers (Appendix B6) contains the set of statements to measure the potential antecedents of the two managerial gaps (Gaps 1 and 2). Each question reflect a specific antecedent:

ANTECEDENTS OF GAP 1	CORRESPONDING STATEMENTS
Marketing research orientation	Statements 1-4
Upward communication	Statements 5-8
Levels of management	Statement 9

ANTECEDENTS OF GAP 2	CORRESPONDING STATEMENTS
Management's commitment to service quality	Statements 10-13
Goal setting	Statements 14-15
Task standardization	Statements 16-17
Perception of feasibility	Statements 18-20

Last part of the questionnaire prepared to survey contact personnel (Appendix C6) contains statements pertaining to potential antecedents of the Gaps 3 and 4 which represent performance shortfalls on the part of the contact personnel. The specific antecedents and statements on the questionnaire pertaining to them are as follows:

ANTECEDENTS OF GAP 3	CORRESPONDING STATEMENTS
Teamwork	Statements 1-5
Employee-job fit	Statements 6-7
Technology-job fit	Statements 8
Perceived control	Statements 9-12
Supervisory control systems	Statements 13-15
Role conflict	Statements 16-19
Role ambiguity	Statements 20-24

ANTECEDENTS OF GAP 4	CORRESPONDING STATEMENTS
Horizontal communication	Statements 25-28
Propensity to overpromise	Statements 29-30

VIII. DISCUSSIONS OF THE RESULTS

VIII. 1. Importance of Each Dimension For Customers of the Hospital

Respondents are asked which one dimension they choose as being the most critical in their assessment of service quality. Results are given in Table 2. Consistent with the findings of PZB in their study of Servqual in different service industries, reliability is chosen by the respondents as being the most critical dimension. For them, the second most important dimension is also reliability. This result imply an important message to the hospital's service providers: be reliable, that is do what you say you are going to do.

Respondents also stated that the least important dimension is empathy. This contradicts with the findings of PZB. What they found is that regardless of the type of service tangibles is the least important dimension even though it may highly be important as a quality cue to potential customers.

When managers are asked how important each of five features are to their customers when they evaluate a hospital's quality of service, they too stated that the reliability is the most important one. They pointed out that customers value responsiveness and assurance as the second important dimension and tangibles as

the least important one. What is important here is that managers know which of the five dimensions is most important to the customers but they fail in predicting the least important one for them. This understanding of managers is very critical in giving quality service valued by the customers.

On the other hand, when employees are asked the same question they exactly predicted which of the five dimensions is valued the most by the customers and which one the least.

Table 2: Importance of each dimension for customers, managers and employees (Numbers indicate the percentage of people choosing that dimension)

		TANGIBLES	*RELIABILITY*	*RESPONSIVENESS*	*ASSURANCE*	*EMPATHY*
CUSTOMERS	*MOST IMPORTANT DIMENSION*	23.83%	30.95%	16.66%	21.42%	7.14%
	SECOND IMPORTANT DIMENSION	23.80	33.36	19.04	19.04	4.76
	LEAST IMPORTANT DIMENSION	11.90	7.14	11.90	9.52	59.54
MANAGERS	*MOST IMPORTANT DIMENSION*		62.5	12.5	25	
	SECOND IMPORTANT DIMENSION		25	37.5	37.5	
	LEAST IMPORTANT DIMENSION	75				25
EMPLOYEES	*MOST IMPORTANT DIMENSION*	12	38	6	34	10
	SECOND IMPORTANT DIMENSION	12	30	28	20	10
	LEAST IMPORTANT DIMENSION	38	6	6	10	40

VIII. 2. Results of Gap 5

Table 3 and Figure 11 shows the Servqual scores (i.e., perception-expectation scores) by dimension for the total customer sample. The more negative the Servqual score the more serious the service quality shortfall in the eyes of the customers. Even though not too big, there is a gap between customers' perceptions and expectations of service quality. The most important dimension of service quality, namely reliability, is in a good position with a smaller negative value than the others. The least important dimension, empathy, has the most negative Servqual score.

Tangibles has a slightly positive Servqual score. This implies that this hospital exceeded customer expectations on this dimension. In fact, as discussed before this was the aim of founders. As can be seen clearly, there is a match between the priorities expressed by customers and the levels of quality delivered by the hospital.

When we compare unweighted average Servqual score with weighted Servqual score, which is calculated by taking into account the relative weights assigned by customers to the five dimensions, we see that overall weighted score is less negative. This indicates that the hospital is performing well on facets that are most critical to customers.

Nevertheless, the negative Servqual score (both unweighted and weighted) show that there is room for service-quality improvement in the hospital.

Table 3: Servqual scores (weighted and unweighted)

	DIMENSION					
	TANGIBLES	*RELIABILITY*	*RESPONSIVENESS*	*ASSURANCE*	*EMPATHY*	*OVERALL SCORE*
UNWEIGHTED	0.014	-0.167	-0.27	-0.188	-0.306	-0.183
WEIGHTED	0.053	-0.023	-0.07	-0.051	-0.069	-0.032

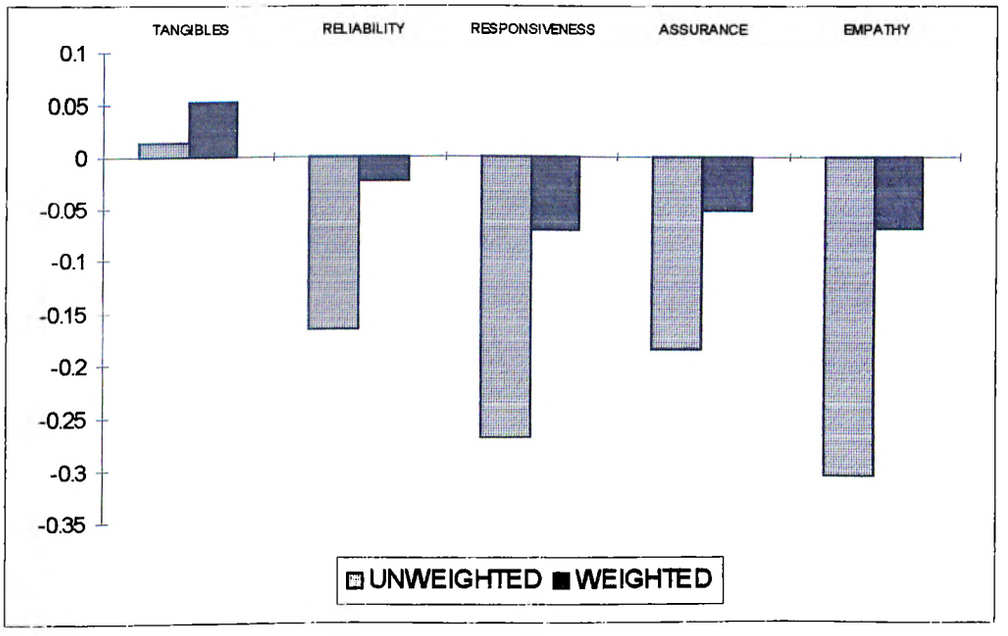

Figure 11: Unweighted Servqual scores by service dimension

When the segmented Gap 5 scores, given in Table 4 are compared it is seen that males' satisfaction is lower than females' (64% of respondents were females and 36% of them were males). What is interesting here is that whereas both sexes give lowest value to same dimension (i.e., empathy) they differ in the most important dimension. For males most important dimension is reliability, however, for females it is the assurance.

There is another interesting point, while female respondents are oversatisfied with the tangibles, male respondents are not.

Table 4: Segmented Gap 5 Scores

	MALES	*FEMALES*
TANGIBLES	-0.07	0.05
RELIABILITY	-0.382	-0.072
RESPONSIVENESS	-0.39	-0.22
ASSURANCE	-0.318	-0.13
EMPATHY	-0.345	-0.288
OVERALL SCORE	-0.3	-0.132
MOST IMPORTANT DIMENSION	RELIABILITY	ASSURANCE
LEAST IMPORTANT DIMENSION	EMPATHY	EMPATHY

VIII. 3. Results of Gap 1 Through Gap 4

The key to delivering high-quality service is to balance customers' expectations and perceptions and close the gaps between the two. So, to understand internal (i.e., within company) shortfalls or gaps that might be responsible for the external (i.e., customer perceived) shortfalls, second and third set of questionnaires were conducted. Results of these questionnaires are given below.

Results of Gap 1

Managers or senior executives understanding of customers' service expectations is very important as they are the ones who have the authority and responsibility for setting priorities. If managers do not fully understand those

expectations, they may trigger a chain of bad decisions and suboptimal resource allocations that result in perceptions of poor service quality. Knowing what customers expect is the first and most critical step in delivering quality service (PZB, 1991).

Gap 1 scores are computed both for managers and contact personnel to ascertain the differences, if any, between the perceptions of these two group. This same strategy is also used for Gap 2, 3 & 4 even though Gaps 1 & 2 are managerial gaps and Gaps 3 & 4 pertain more to first-line service employees.

Even though the Gap 1 scores for both groups are negative one cannot say that there is a huge gap between customer expectations and management perceptions of customer expectations. However, negative scores indicate that there is room for improvement. As can be seen from Table 5 managers have a better understanding of customers' expectations than contact personnel have. That is to say, managers have a smaller Gap 1 (-0.095) than contact personnel (-0.2355).

As seen from Table 5 and Figure 12, the highest score belongs to reliability dimension, which is what the customers value the most. Even, this score is positive for managers.

When we analyze weighted Gap 1 scores of manager sample, we see that the overall score becomes more negative meaning a higher gap. The reason of this increase is that they are unable to predict how much value customers give to tangibles, responsiveness and assurance which is clear from the larger weighted Gap 1 scores for these dimensions.

Table 5: Gap 1 Scores

	DIMENSION					
	TANGIBLES	*RELIABILITY*	*RESPONSIVENES*	*ASSURANCE*	*EMPATHY*	*OVERALL SCORE*
unweighted	-0.0104	0.125	-0.0902	-0.135	-0.366	-0.095
MANAGERS weighted	-0.7233	0.9437	-0.2356	-0.5769	-0.026	-0.1236
EMPLOYEES unweighted	-0.4116	-0.08	-0.1877	-0.201	-0.296	-0.235

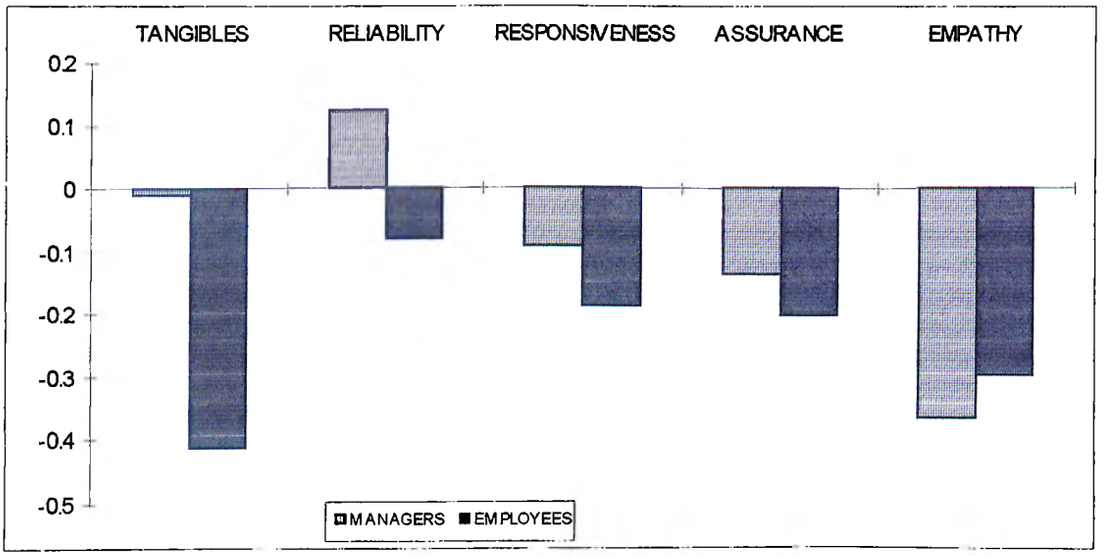

Figure 12: Gap 1 Scores by Dimensions

Results of Gap 2

For achieving superior quality service, management's correct perceptions of customers' expectations is necessary, but not sufficient. Presence of performance standards mirroring management's perceptions of customers' expectations is another prerequisite. So, the next step in this study is to check if the hospital has concrete performance standards which reflect the correct perception of customers' expectations or not (PZB, 1991).

As observed from Table 6 and Figure 13 Gap 2 is not very wide. But as the scores fall short of seven there exist a gap and there is opportunity for gap closure. The biggest gap for managers pertain to reliability which is the dimension that is most valued by the customers. This gives an important information, meaning that there exist service quality standards related to reliability but they are not enough and they need modification. For the contact personnel, on the other hand biggest gap is for the empathy representing a looser set of standards. However, as empathy is a dimension least valued by the customers it seems that it does not need any modification.

Table 6: Gap 2 Scores

	DIMENSION					
	TANGIBLES	*RELIABILITY*	*RESPONSIVENESS*	*ASSURANCE*	*EMPATHY*	*OVERALL SCORE*
MANAGERS	5.1	5	5.4	5.6	5.6	5.3
EMPLOYEES	5.6	5.2	5.6	5.2	4.7	5.3

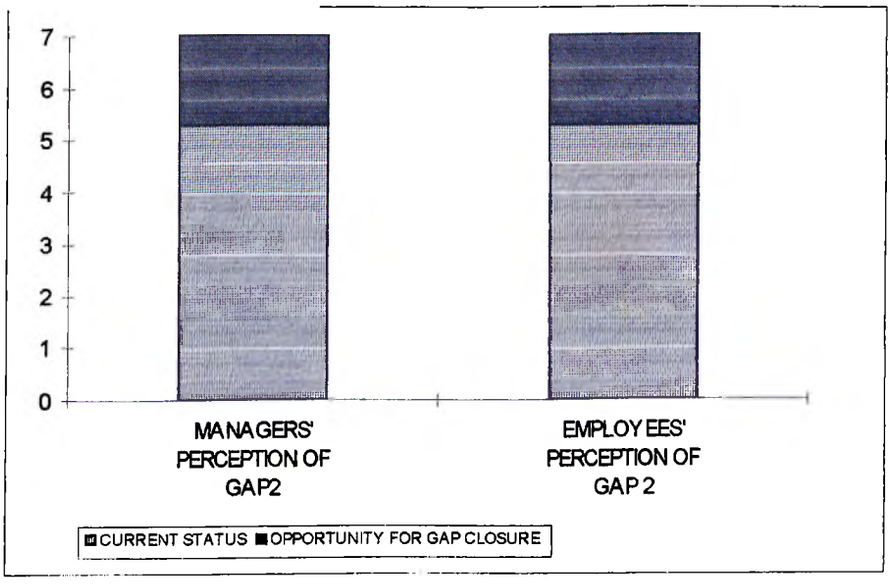

Figure 13: Comparison of overall Gap 2 scores for managers and employees

In their study, PZB had concluded that contact personnel's perceptions of Gap 2 were generally more optimistic implying smaller gaps. However, in this study this is not the case, one cannot make such a generalization. In fact, overall Gap 2 scores are equal for both samples.

Results of Gap 3

The quality of service delivered by customer contact personnel is influenced by the standards against which they are evaluated and compensated. When service standards are absent or when the standards in place do not reflect customers' expectations quality of service as perceived by customers is likely to suffer. However, existence of guidelines do not guarantee high-quality service. To be effective, service standards must be backed up by adequate and appropriate resources, namely people, systems and technology (PZB, 1991).

When there exist Gap 3 the level of service delivery also falls short of what customers expect. Therefore, the next step was to analyze this gap. The Gap 3 results are shown in Table 7 and Figure 14.

Table 7: Gap 3 Scores

	DIMENSION					
	TANGIBLES	*RELIABILITY*	*RESPONSIVENESS*	*ASSURANCE*	*EMPATHY*	*OVERALL SCORE*
MANAGERS	5.4	5.3	5.7	5.6	5.9	5.58
EMPLOYEES	5.3	4.9	5.3	5.2	5.0	5.14

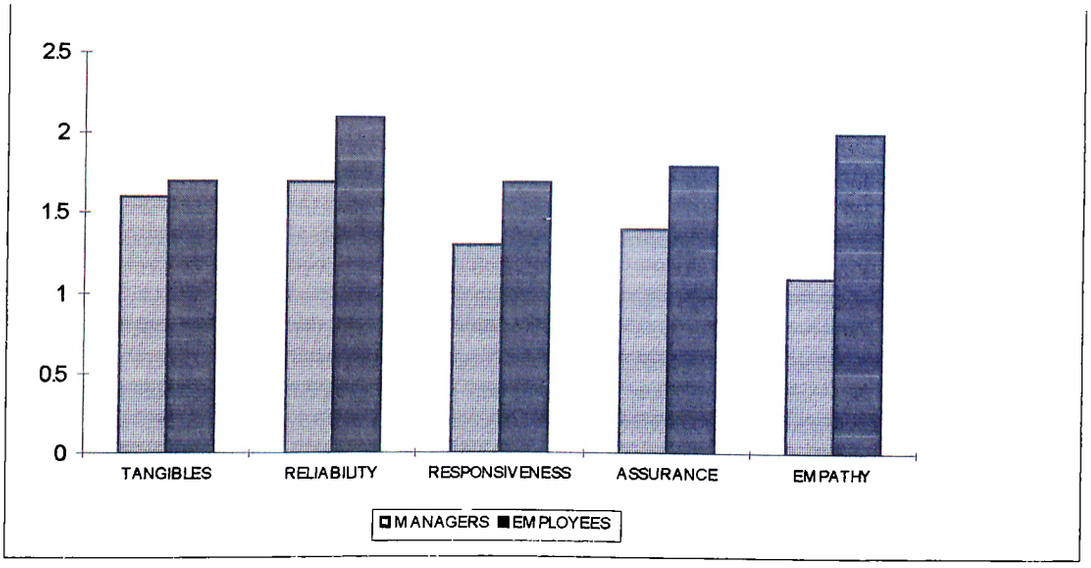

Figure 14: Graph showing opportunities for improving Gap 3

Results of Gap 3 shows that there are problems in having the necessary resources of people, systems or technology type. In fact, because health service is highly interactive and labor intensive it is especially vulnerable to Gap 3.

What PZB had found in their study was that contact personnel's perceptions of Gap 3 were more optimistic than managers. But we see that the reverse is true for this hospital.

One important point that should be emphasized is that the dimension which is valued most by the customers has the greatest Gap 3 score among others and there is higher opportunity for gap closure at this dimension. This is clearly seen from Figure 14.

Results of Gap 4

A key determinant of customers' expectations is the service provider's external communications. A discrepancy between the actual service and the promised service has an adverse effect on Gap 5. So, it is important to analyze whether Gap 4 exist and if exist it is important to do something.

Gap 4 scores are given in Table 8 and Figure 15. It is clearly seen that employees are more optimistic about Gap 4 than managers. This result is consistent with PZB's findings.

Table 8: Gap 4 Scores

	TANGIBLES	*RELIABILITY*	*RESPONSIVENESS*	*ASSURANCE*	*EMPATHY*	*OVERALL SCORE*
MANAGERS	5	4.8	4.9	4.8	4.9	4.88
EMPLOYEES	5	5.1	5.6	5.3	5.1	5.22

As the Gap 4 scores fall short of 7 there is opportunity for gap closure. Existence of Gap 4 indicates that they have problems about the external communications. To close Gap 4 several thing can be done. For example they can develop appropriate and effective communications about service quality or provide consistent service across branches or outlets.

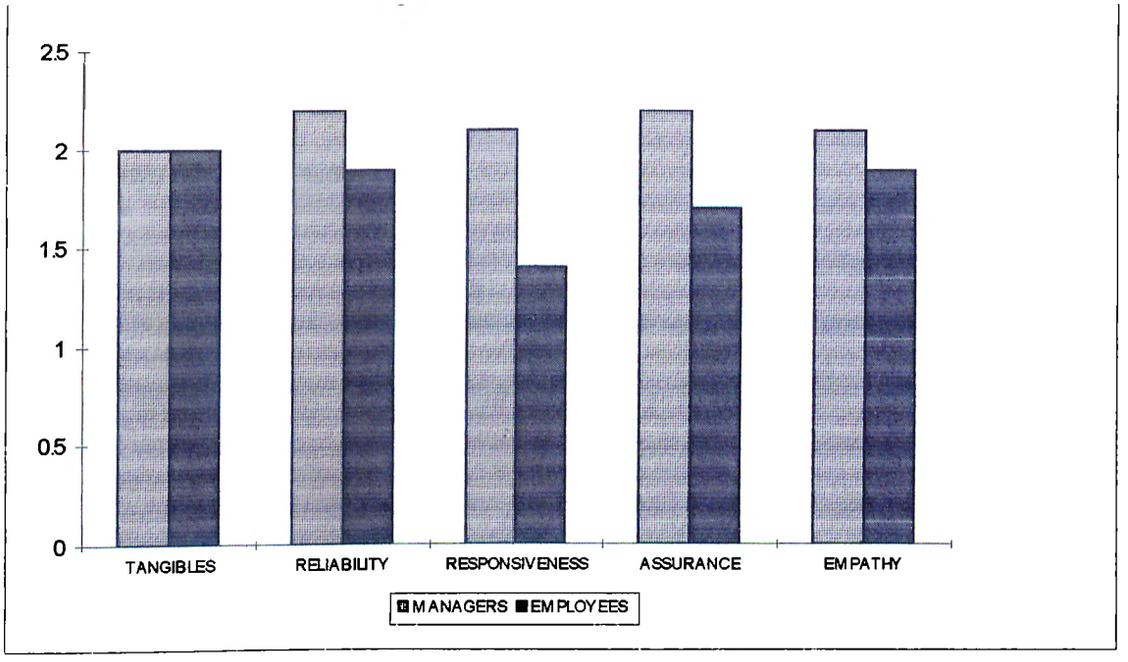

Figure 15: Opportunities for improving Gap 4

VIII. 4. Antecedents of Gap 1 Through Gap 4

Finding antecedents of gaps is important before deciding on what to do to close the existing gaps. Thus, in this part of the study antecedents of each gap are analyzed one by one.

Antecedents of Gap 1

PZB's gap model identify three factors that are possible contributors to Gap 1. These factors and the relevant scores are given in Table 9.

Table 9: Antecedents of Gap 1

SPECIFIC REASON	*SCORE*
MARKETING RESEARCH ORIENTATION	4.15
UPWARD COMMUNICATION	5.06
LEVELS OF MANAGEMENT	5.02

Despite the relatively small Gap 1, results about the factors that can potentially result in Gap 1 reveal opportunities for improvement in the hospital. (The discrepancy between each average score and a score of seven represents the potential for improvement.) Results imply that improvements can be made along all these factors. Among the three, marketing research orientation is a more significant problem than either upward communication or levels of management. This means that managers' effort to understand customers' needs and expectations through formal and informal information-gathering activities fall short of requirement. In

fact, hospital conduct research regularly to generate information about what customers think and want. However, the score shows there is a problem. Maybe, the research that they conduct do not focus on quality of service delivered or managers do not understand and/or utilize the research findings.

In the hospital there are not many levels of management inhibiting downward communication from top management to contact personnel or vice versa. However, results indicate that there are problems related to upward communication and levels of management. In fact, hospital management try to encourage suggestions from customer contact personnel concerning quality of service. However, there is problem and room for improving upward communication.

Antecedents of Gap 2

Inadequate commitment to service quality, lack of perception of feasibility, inadequate task standardization and absence of goal setting are the factors leading to Gap 2. When we look at the scores of these factors in Table 10 we see that the highest opportunity for improvement exist for task standardization meaning that hard and soft technology can be used to standardize service tasks whenever possible.

Table 10: Antecedents of Gap 2

SPECIFIC REASON	SCORE
MANAGEMENT'S COMMITMENT TO SERVICE QUALITY	4.406
GOAL SETTING	5
TASK STANDARDIZATION	4.312
PERCEPTION OF FEASIBILITY	5.703

Second factor that needs improvement to close Gap 2 is the management's commitment to service quality. This factor is very important because top-management commitment is the key to setting service standards to deliver quality and middle management commitment is the key to making those standards work. Lack of support from middle management can derail the service-quality journey. In fact, in line with TQM study top management is working heavily on delivering quality service, i.e. they are committed to quality. However, they may not be successful in communicating their commitment or there may be a problem in taking middle managers' support.

Goal setting also seems to be a problematic issue as its score is two point below seven. That means the hospital is somewhat unsuccessful in establishing goals or standards to guide their employees in providing service quality. On the other hand, it seems most probable that this situation will change in the near future as they proceed on their TQM study. It is advisable that they reperform this questionnaire to see how much progress they made.

Antecedents of Gap 3

PZB's research indicated that seven key factors contribute to Gap 3. These factors and their scores are cited in Table 11. We see that there is room for making improvement in all of these factors which means closing Gap 3 and in turn increasing service quality.

Table 11: Antecedents of Gap 3

SPECIFIC REASON	*SCORE*
TEAMWORK	5.62
EMPLOYEE JOB FIT	5.4
TECHNOLOGY JOB FIT	5.33
PERCEIVED CONTROL	3.825
SUPERVISORY CONTROL SYSTEMS	3.313
ROLE CONFLICT	4.54
ROLE AMBIGUITY	3.96

The lowest score pertaining to supervisory control systems shows the existence of a problem about the appropriateness of the evaluation and reward systems in the company. Perhaps, employees do not know what aspects of their jobs will be stressed most in performance evaluations. Whatever the reason is hospital's control systems needs revision.

Second factor with low value is perceived control, that is the extent to which employees perceive that they can act flexibly rather than by rule in problem situations encountered in providing services. Perceived control maybe low when the contact employees' flexibility in serving customers is limited by the organizational rules, procedures and culture. Another reason why perceived control is low can be the authority to achieve specific outcomes with customers lying elsewhere in the organization.

Role ambiguity is the third factor with low value. Role ambiguity is the extent to which employees are uncertain about what managers or supervisors expect from them and how to satisfy those expectations. This role ambiguity exists when

employees do not possess the information or training necessary to perform their jobs adequately. Communication, feedback, confidence and competence are four key tools that management can use to provide role clarity to employees.

Role conflict, namely the extent to which employees perceive that they cannot satisfy all the demands of all the individuals (internal and external) they must serve is the fourth factor having the greatest opportunity for improvement to close Gap 3. This factors imply that employees feel that expectations of them are inconsistent or too demanding. Many times this occurs because too many customers need or want service at the same time. Role conflict have a negative effect on employees' satisfaction and performance in their organization, besides it can increase absenteeism and turnover. To minimize role conflict hospital can define service roles and standards in terms of customers' expectations.

Although the scores of the remaining three factors, teamwork, employee job fit and technology job fit are not as low as the other four factors they have to be worked on and improved to close Gap 3.

Antecedents of Gap 4

Two key factors were found to contribute to Gap 4. These are inadequate horizontal communication and propensity to overpromise. Investigation of the results given in Table 12 shows that there are opportunities for gap closure. This indicates that the hospital needs horizontal communication and that the propensity to overpromise is high. In fact, score for first factor show wider opportunities for

gap closure. Communications between different functional areas in the hospital are necessary and very important to achieve the common goals of the organization. This hospital need coordination or integration across departments to be able to deliver quality service. Indeed, breaking down the walls between functions is difficult and time consuming, but high-quality service cannot be delivered without this communication. But in this hospital what is observed is that this walls are thinner and can be easily broken down. From the score it is seen that overpromising is high in the health sector. Because overpromising can inflate customers' expectations which may lead to diminished service quality it is advisable that they work on it.

Table 12: Antecedents of Gap 4

SPECIFIC REASON	*SCORE*
HORIZONTAL COMMUNICATION	3.78
PROPENSITY TO OVERPROMISE	4.56

IX. SUMMARY AND CONCLUSIONS

In today's competitive business world more and more managers of service providing firms understand that delivering quality service by meeting or exceeding customers' expectations is very important to achieve a distinctive position and a sustainable advantage.

It is strongly recommended that executives who are dedicated to service quality continuously monitor customers' perceptions of service quality; identify the causes of service quality shortfalls and take appropriate action to improve the quality of service. To make these improvements measurement is crucial. Servqual method gives service providers this opportunity. Unlike the traditional belief, which says services are hard to measure, Servqual says that it is measurable.

In fact, Servqual provides a structure for understanding service quality, measuring it and diagnosing service quality problems. This method is also called 'gaps model', because it features discrepancies or gaps that need to be closed to offer excellent service.

In this study, Servqual method is used to measure the service quality of a private hospital. For this purpose three sets of questionnaires are distributed: First

set to customers to measure Gap 5, namely the differences between customers' expectations and perceptions of service quality; second set to managers and third set to employees. The aim of the second and third sets of questionnaires was to find out the reasons of Gap 5 by measuring Gap through 4. Even though Gaps 1 & 2 are managerial gaps and Gaps 3 & 4 more for contact personnel Gaps 1 through 4 are measured both for managers and employees to see the differences, if any, between their perceptions of all four gaps. In addition to these, antecedents of Gaps 1 through 4 are measured through the questionnaires answered by the managers and employees.

We saw that the Gap 5 is not very big. By looking at this result one can say that the hospital is able to give what customers expect. However, it is valuable to analyze how well customers' expectations and perceptions are formed.

In the methodology part it is said that the questionnaire was conducted among in-patients. This is a short-coming for this research because they are still taking the service; so they may be biased in interpreting their perceptions. If the ones that are discharged from the hospital could be given the questionnaires we could end up with better results.

Another issue is how well patients expectations are formed. Presumably, expectations come mainly from past experience with similar services. If many of the respondents in this study are first time users (in fact this is most probably the case) expectations are not well formed.

In addition to these we know that in Turkey hospitals are in a very bad condition, especially physically and also quality of the service is questionable in these traditional hospitals. It is well known that patients are generally badly treated by the hospital staff. Only some of the private hospitals treat patients kindly and try to be responsive to their needs. All these make patients, coming to the hospital investigated in this study, be influenced with the physical appearance of the hospital and its staff trying to be kind and responsive. This first impression is an important factor influencing their perceptions. This concern make the results of the Gap 5 questionable. Therefore, one that will use Servqual should keep this in mind while conducting the study and interpreting the results.

A final remark that the author of this thesis wants to underline is the fact that if this study was conducted as a part of the TQM study of the hospital employees' commitment would be higher and it would be possible to have more reliable results. However, as they knew that these questionnaires were a part of a thesis study they were not volunteer to answer the questionnaires. Even, it was not possible to take back any of the 35 questionnaires that were distributed to doctors. Thus, it is well advised to the ones that will conduct Servqual to try to carry out the study as a part of the organizational studies.

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APPENDIX A

QUESTIONNAIRE FOR PATIENTS

(TO MEASURE GAP 5)

Appendix A.1. : Statements to Measure Customer Expectations

Directions: Based on your experiences as a consumer of hospitals services, please think about the kind of hospitals company that would deliver excellent quality of service. Think about the kind of hospitals company with which you would be pleased to do business. Please show the extent to which you think such a hospitals company would possess the feature described by each statement. If you feel a feature is not at all essential for excellent hospitals companies such as the one you have in mind, circle the number 1. If you feel a feature is absolutely essential for excellent hospitals companies, circle 7. If your feelings are less strong, circle one of the numbers in the middle. There are no right or wrong answers- all we are interested in is a number that truly reflects your feelings regarding hospitals that would deliver excellent quality of service.

Strongly Disagree						**Strongly Agree**
1	2	3	4	5	6	7

1. Excellent hospitals will have modern-looking equipment.

1 2 3 4 5 6 7

2. The physical facilities at excellent hospitals will be visually appealing.

1 2 3 4 5 6 7

3. Employees at excellent hospitals will be neat-appearing.

1 2 3 4 5 6 7

4. Materials associated with the service will be visually appealing in excellent hospitals.

1 2 3 4 5 6 7

5. When excellent hospitals promise to do something by a certain time, they will do so.

1 2 3 4 5 6 7

6. When a customer has a problem, excellent hospitals will show a sincere interest in solving it.

1 2 3 4 5 6 7

7. Excellent hospitals will perform the service right the first time.

1 2 3 4 5 6 7

8. Excellent hospitals will provide their services at the time they promise to do so.

1 2 3 4 5 6 7

9. Excellent hospitals will insist on error-free records.

1 2 3 4 5 6 7

10. Employees in excellent hospitals will tell patients exactly when services will be performed.

1 2 3 4 5 6 7

11. Employees in excellent hospitals will give prompt service to patient.

1 2 3 4 5 6 7

12. Employees in excellent hospitals will always be willing to help patient.

1 2 3 4 5 6 7

13. Employees in excellent hospitals will never be too busy to respond to patient's requests.

1 2 3 4 5 6 7

14. The behavior of employees in excellent hospitals will instill confidence in patients.

1 2 3 4 5 6 7

15. Patients of excellent hospitals will feel safe in their transactions.

1 2 3 4 5 6 7

16. Employees in excellent hospitals will be consistently courteous with patients.

1 2 3 4 5 6 7

17. Employees in excellent hospitals will have the knowledge to answer patients' questions.

1 2 3 4 5 6 7

18. Excellent hospitals will give patients individual attention.

1 2 3 4 5 6 7

19. Excellent hospitals will have operating hours convenient to all their patients.

1 2 3 4 5 6 7

20. Excellent hospitals will have employees who give patients personal attention.

1 2 3 4 5 6 7

21. Excellent hospitals will have the patient's best interests at heart.

1 2 3 4 5 6 7

22. The employees of excellent hospitals will understand the specific needs of their patients.

1 2 3 4 5 6 7

Appendix A.2. : Statements to measure How Important Each Dimension to Customers

Directions: Listed below are five features pertaining to hospitals and services they offer. We would like to know how important each of these features is to you when you evaluate a hospital's quality of service. Please allocate a total of 100 points among the five features according to how important each feature is to you- the more important a feature is to you, the more points you should allocate to it. Please ensure that the points you allocate to the five features add up to 100.

1. The appearance of the hospital's physical facilities, equipment, personnel, and communication materials. ----------Points

2. The hospital's ability to perform the promised service dependably and accurately. ----------Points

3. The hospital's willingness to help customers and provide prompt service. ----------Points

4. The knowledge and courtesy of the hospital's employees and their ability to convey trust and confidence. ----------Points

5. The caring, individualized attention the hospital provides its customers. ----------Points

TOTAL points allocated: **100 Points**

Which one feature among the above five is most important to you? (Please enter the feature's number) ----------

Which feature is second most important to you? ----------

Which feature is least important to you? ----------

Appendix A.3. : Statements to Measure Perceptions of Customers

Directions: The following set of statements relate to your feelings about X hospital. For each statement, please show the extent to which you believe X hospital has the feature described by the statement. Once again, circling a 1 means that you strongly disagree that X hospital has that feature, and circling a 7 means that you strongly agree. You may circle any of the numbers in the middle that show how strong your feelings are. There are no right or wrong answers- all we are interested in is a number that best shows your perceptions about X hospitals.

Strongly Disagree						**Strongly Agree**
1	2	3	4	5	6	7

1. X hospital has modern-looking equipment.

1 2 3 4 5 6 7

2. The physical facilities at X hospital are visually appealing.

1 2 3 4 5 6 7

3. Employees at X hospital are neat-appearing.

1 2 3 4 5 6 7

4. Materials associated with the service are visually appealing in X hospitals.

1 2 3 4 5 6 7

5. When X hospital promise to do something by a certain time, they does so.

1 2 3 4 5 6 7

6. When you has a problem, X hospital shows a sincere interest in solving it.

1 2 3 4 5 6 7

7. X hospital performs the service right the first time.

1 2 3 4 5 6 7

8. X hospital provides their services at the time they promise to do so.

1 2 3 4 5 6 7

9. X hospital insists on error-free records.

1 2 3 4 5 6 7

10. Employees in X hospital tell you exactly when services will be performed.

1 2 3 4 5 6 7

11. Employees in X hospital give you prompt service.

1 2 3 4 5 6 7

12. Employees in X hospital are always be willing to help you

1 2 3 4 5 6 7

13. Employees in X hospital are never be too busy to respond to your requests.

1 2 3 4 5 6 7

14. The behavior of employees in X hospital instills confidence in you.

1 2 3 4 5 6 7

15. You feel safe in your transactions with X hospital.

1 2 3 4 5 6 7

16. Employees in X hospital are consistently courteous with you.

1 2 3 4 5 6 7

17. Employees in X hospital have the knowledge to answer your questions.

1 2 3 4 5 6 7

18. X hospital gives you individual attention.

1 2 3 4 5 6 7

19. X hospital has operating hours convenient to all their patients.

1 2 3 4 5 6 7

20. X hospital has employees who give you personal attention.

1 2 3 4 5 6 7

21. X hospital has your best interests at heart.

1 2 3 4 5 6 7

22. Employees of X hospital understand your specific needs.

1 2 3 4 5 6 7

APPENDIX B

QUESTIONNAIRE FOR MANAGERS

(TO MEASURE GAPS 1 THROUGH 4 AND THE ANTECEDENTS OF GAPS 1 AND 2)

Appendix B. 1. : Statements to Measure Gap 1

Directions: This portion of the survey deals with how you think your patients feel about a hospital that, in their view, delivers excellent quality of service. Please indicate the extent to which your patients feel that excellent hospitals would possess the feature described by each statement. If your patients are likely to feel a feature is not at all essential for excellent hospitals, circle the number 1. If your patients are likely to feel a feature is absolutely essential, circle 7. If your patients' feelings are likely to be less strong, circle one of the numbers in the middle. Remember, there are no right or wrong answers- we are interested in what you think your patients' feelings are regarding hospitals that would deliver excellent quality of service.

Strongly Disagree						**Strongly Agree**
1	2	3	4	5	6	7

1. Excellent hospitals will have modern-looking equipment.

1 2 3 4 5 6 7

2. The physical facilities at excellent hospitals will be visually appealing.

1 2 3 4 5 6 7

3. Employees at excellent hospitals will be neat-appearing.

1 2 3 4 5 6 7

4. Materials associated with the service will be visually appealing in excellent hospitals.

1 2 3 4 5 6 7

5. When excellent hospitals promise to do something by a certain time, they will do so.

1 2 3 4 5 6 7

6. When a patient has a problem, excellent hospitals will show a sincere interest in solving it.

1 2 3 4 5 6 7

7. Excellent hospitals will perform the service right the first time.

1 2 3 4 5 6 7

8. Excellent hospitals will provide their services at the time they promise to do so.

1 2 3 4 5 6 7

9. Excellent hospitals will insist on error-free records.

1 2 3 4 5 6 7

10. Employees in excellent hospitals will tell patients exactly when services will be performed.

1 2 3 4 5 6 7

11. Employees in excellent hospitals will give prompt service to patient.

1 2 3 4 5 6 7

12. Employees in excellent hospitals will always be willing to help patient.

1 2 3 4 5 6 7

13. Employees in excellent hospitals will never be too busy to respond to patient's requests.

1 2 3 4 5 6 7

14. The behavior of employees in excellent hospitals will instill confidence in patients.

1 2 3 4 5 6 7

15. Patients of excellent hospitals will feel safe in their transactions.

1 2 3 4 5 6 7

16. Employees in excellent hospitals will be consistently courteous with patients.

1 2 3 4 5 6 7

17. Employees in excellent hospitals will have the knowledge to answer patients' questions.

1 2 3 4 5 6 7

18. Excellent hospitals will give patients individual attention.

1 2 3 4 5 6 7

19. Excellent hospitals will have operating hours convenient to all their patients.

1 2 3 4 5 6 7

20. Excellent hospitals will have employees who give patients personal attention.

1 2 3 4 5 6 7

21. Excellent hospitals will have the patient's best interests at heart.

1 2 3 4 5 6 7

22. The employees of excellent hospitals will understand the specific needs of their patients.

1 2 3 4 5 6 7

Appendix B. 2. : Assessment Section

Directions: Listed below are five features pertaining to hospitals and services they offer. We would like to know how important each of these features is to your customers when they evaluate a hospital's quality of service. Please allocate a total of 100 points among the five features according to how important each feature is to your customers- the more important a feature is likely to be to your customers, the more points you should allocate to it. Please ensure that the points you allocate to the five features add up to 100.

1. The appearance of the hospital's physical facilities, equipment, personnel, and communication materials. ----------
Points

2. The hospital's ability to perform the promised service dependably and accurately. ----------
Points

3. The hospital's willingness to help patients and provide prompt service. ----------
Points

4. The knowledge and courtesy of the hospital's employees and their ability to convey trust and confidence. ----------
Points

5. The caring, individualized attention the hospital provides its patients. ----------
Points

TOTAL points allocated: **100 Points**

Which one feature among the above five is most important to you? (Please enter the feature's number) ----------

Which feature is second most important to you? ----------

Which feature is least important to you? ----------

Appendix B. 3. : Statements to Measure Gap 2

Directions: Performance standards in companies can be formal- written, explicit, and communicated to employees. They can also be informal- verbal, implicit, and assumed to be understood by employees. For each of the following features, circle the number that best describes the extent to which performance standards are formalized in your company. If there are no standards in your hospital, check the appropriate box.

Informal Standards					**Formal Standards**			**No Standards Exist**
	1	2	3	4	5	6	7	( )

1. The appearance of the hospital's physical facilities, equipment, personnel, and communication materials.

1 2 3 4 5 6 7 ( )

2. The ability of the hospital to perform the promised service dependably and accurately.

1 2 3 4 5 6 7 ( )

3. The willingness of the hospital to patients and provide prompt service.

1 2 3 4 5 6 7 ( )

4. The knowledge and courtesy of the hospital's employees and their ability to convey trust and confidence.

1 2 3 4 5 6 7 ( )

5. The caring, individualized attention the company provides its customers.

1 2 3 4 5 6 7 ( )

Appendix B. 4. : Statements to Measure Gap 3

Directions: Listed below are the same five features. Employees and units sometimes experience difficulty in achieving the standards established for them for each feature below, circle the number that best represents the degree to which your hospital and its employees are able to meet the performance standards established. Remember, there are no right or wrong answers- we need your candid assessment for this question to be helpful.

Unable to Meet Standards Consistently						**Able to Meet Standards Consistently**	**No Standards Exist**
1	2	3	4	5	6	7	( )

---

1. The appearance of the hospital's physical facilities, equipment, personnel, and communication materials.

1 2 3 4 5 6 7 ( )

2. The ability of the hospital to perform the promised service dependably and accurately.

1 2 3 4 5 6 7 ( )

3. The willingness of the hospital to patients and provide prompt service.

1 2 3 4 5 6 7 ( )

4. The knowledge and courtesy of the hospital's employees and their ability to convey trust and confidence.

1 2 3 4 5 6 7 ( )

5. The caring, individualized attention the company provides its customers.

1 2 3 4 5 6 7 ( )

Appendix B. 5. : Statements to Measure Gap 4

Directions: Salespeople, advertising, and other company communications often make promises about the level of service a company will deliver. For each feature below, we want to know the extent to which you believe that your hospital and its employees deliver the level of service promised to patients. Circle the number that best describes your perception.

Unable to Meet Promises Consistently						**Able to Meet Promises Consistently**
1	2	3	4	5	6	7

---

1. The appearance of the hospital's physical facilities, equipment, personnel, and communication materials.

1 2 3 4 5 6 7

2. The ability of the hospital to perform the promised service dependably and accurately.

1 2 3 4 5 6 7

3. The willingness of the hospital to patients and provide prompt service.

1 2 3 4 5 6 7

4. The knowledge and courtesy of the hospital's employees and their ability to convey trust and confidence.

1 2 3 4 5 6 7

5. The caring, individualized attention the company provides its customers.

1 2 3 4 5 6 7

Appendix B. 6. : Statements to Measure Antecedents of Gaps 1 & 2

Directions: Listed below are a number of statements intended to measure your perceptions about your hospital and its operations. Please indicate the extent to which you disagree or agree with each statement by circling one of the seven numbers next to each statement. If you strongly disagree circle 1. If you strongly agree, circle 7. If your feelings are not strong, circle one of the numbers in the middle. There are no right or wrong answers. Please tell us honestly how you feel.

Strongly Disagree						**Strongly Agree**
1	2	3	4	5	6	7

1. We regularly collect information about the needs of our patients.

1 2 3 4 5 6 7

2. We rarely use marketing research information that is collected about our patients. (-)

1 2 3 4 5 6 7

3. We regularly collect information about the service-quality expectations of our patients.

1 2 3 4 5 6 7

4. The managers in our hospital rarely interact with patients. (-)

1 2 3 4 5 6 7

5. The customer-contact personnel in our hospital frequently communicate with management.

1 2 3 4 5 6 7

6. Managers in our hospital rarely seek suggestions about serving patients from customer-contact personnel. (-)

1 2 3 4 5 6 7

7. The managers in our hospital frequently have face-to-face interactions with customer-contact personnel.

1 2 3 4 5 6 7

8. The primary means of communication in our hospital between contact personnel and upper-level managers is through memos.(-)

1 2 3 4 5 6 7

9. Our hospital has too many levels of management between contact personnel and top management. (-)

1 2 3 4 5 6 7

10. Our hospital does not commit the necessary resources for service quality. (-)

1 2 3 4 5 6 7

11. Our hospital has internal programs for improving the quality of service to patients.

1 2 3 4 5 6 7

12. In our hospital, managers who improve quality of service are more likely to be rewarded than other managers.

1 2 3 4 5 6 7

13. Our hospital emphasizes selling as much as or more than it emphasizes serving patients. (-)

1 2 3 4 5 6 7

14. Our hospital has a formal process for setting quality of service goals for employees.

1 2 3 4 5 6 7

15. In our hospital we try to set specific quality of service goals.

1 2 3 4 5 6 7

16. Our hospital effectively uses automation to achieve consistency in serving customers.

1 2 3 4 5 6 7

17. Programs are in place in our hospital to improve operating procedures so as to provide consistent service.

1 2 3 4 5 6 7

18. Our hospital has the necessary capabilities to meet patients' requirements for service.

1 2 3 4 5 6 7

19. If we gave our patients the level of service they really want, we would go broke. (-)

1 2 3 4 5 6 7

20. Our hospital has the operating systems to deliver the level of service patients demand.

1 2 3 4 5 6 7

APPENDIX C

QUESTIONNAIRE FOR CONTACT-PERSONNEL

(TO MEASURE GAPS 1 THROUGH 4
AND
ANTECEDENTS OF GAPS 3 AND 4)

Appendix C. 1. : Statements to Measure Gap 1

Directions: This portion of the survey deals with how you think your patients feel about a hospital that, in their view, delivers excellent quality of service. Please indicate the extent to which your patients feel that excellent hospitals would possess the feature described by each statement. If your patients are likely to feel a feature is not at all essential for excellent hospitals, circle the number 1. If your patients are likely to feel a feature is absolutely essential, circle 7. If your patients' feelings are likely to be less strong, circle one of the numbers in the middle. Remember, there are no right or wrong answers- we are interested in what you think your patients' feelings are regarding hospitals that would deliver excellent quality of service.

Strongly Disagree						**Strongly Agree**
1	2	3	4	5	6	7

1. Excellent hospitals will have modern-looking equipment.

1 2 3 4 5 6 7

2. The physical facilities at excellent hospitals will be visually appealing.

1 2 3 4 5 6 7

3. Employees at excellent hospitals will be neat-appearing.

1 2 3 4 5 6 7

4. Materials associated with the service will be visually appealing in excellent hospitals.

1 2 3 4 5 6 7

5. When excellent hospitals promise to do something by a certain time, they will do so.

1 2 3 4 5 6 7

6. When a patient has a problem, excellent hospitals will show a sincere interest in solving it.

1 2 3 4 5 6 7

7. Excellent hospitals will perform the service right the first time.

1 2 3 4 5 6 7

8. Excellent hospitals will provide their services at the time they promise to do so.

1 2 3 4 5 6 7

9. Excellent hospitals will insist on error-free records.

1 2 3 4 5 6 7

10. Employees in excellent hospitals will tell patients exactly when services will be performed.

1 2 3 4 5 6 7

11. Employees in excellent hospitals will give prompt service to patient.

1 2 3 4 5 6 7

12. Employees in excellent hospitals will always be willing to help patient.

1 2 3 4 5 6 7

13. Employees in excellent hospitals will never be too busy to respond to patient's requests.

1 2 3 4 5 6 7

14. The behavior of employees in excellent hospitals will instill confidence in patients.

1 2 3 4 5 6 7

15. Patients of excellent hospitals will feel safe in their transactions.

1 2 3 4 5 6 7

16. Employees in excellent hospitals will be consistently courteous with patients.

1 2 3 4 5 6 7

17. Employees in excellent hospitals will have the knowledge to answer patients' questions.

1 2 3 4 5 6 7

18. Excellent hospitals will give patients individual attention.

1 2 3 4 5 6 7

19. Excellent hospitals will have operating hours convenient to all their patients.

1 2 3 4 5 6 7

20. Excellent hospitals will have employees who give patients personal attention.

1 2 3 4 5 6 7

21. Excellent hospitals will have the patient's best interests at heart.

1 2 3 4 5 6 7

22. The employees of excellent hospitals will understand the specific needs of their patients.

1 2 3 4 5 6 7

Appendix C. 2. : Assessment Section

Directions: Listed below are five features pertaining to hospitals and services they offer. We would like to know how important each of these features is to your customers when they evaluate a hospital's quality of service. Please allocate a total of 100 points among the five features according to how important each feature is to your customers- the more important a feature is likely to be to your customers, the more points you should allocate to it. Please ensure that the points you allocate to the five features add up to 100.

1. The appearance of the hospital's physical facilities, equipment, personnel, and communication materials.	----------Points
2. The hospital's ability to perform the promised service dependably and accurately.	----------Points
3. The hospital's willingness to help patients and provide prompt service.	----------Points
4. The knowledge and courtesy of the hospital's employees and their ability to convey trust and confidence.	----------Points
5. The caring, individualized attention the hospital provides its patients.	----------Points
TOTAL points allocated:	**100 Points**
Which one feature among the above five is most important to you? (Please enter the feature's number)	----------
Which feature is second most important to you?	----------
Which feature is least important to you?	----------

Appendix C. 3. : Statements to Measure Gap 2

Directions: Performance standards in companies can be formal- written, explicit, and communicated to employees. They can also be informal- verbal, implicit, and assumed to be understood by employees. For each of the following features, circle the number that best describes the extent to which performance standards are formalized in your company. If there are no standards in your hospital, check the appropriate box.

Informal Standards						**Formal Standards**	**No Standards Exist**
1	2	3	4	5	6	7	( )

---

1. The appearance of the hospital's physical facilities, equipment, personnel, and communication materials.

1 2 3 4 5 6 7 ( )

2. The ability of the hospital to perform the promised service dependably and accurately.

1 2 3 4 5 6 7 ( )

3. The willingness of the hospital to patients and provide prompt service.

1 2 3 4 5 6 7 ( )

4. The knowledge and courtesy of the hospital's employees and their ability to convey trust and confidence.

1 2 3 4 5 6 7 ( )

5. The caring, individualized attention the company provides its customers.

1 2 3 4 5 6 7 ( )

Appendix C. 4. : Statements to Measure Gap 3

Directions: Listed below are the same five features. Employees and units sometimes experience difficulty in achieving the standards established for them for each feature below, circle the number that best represents the degree to which your hospital and its employees are able to meet the performance standards established. Remember, there are no right or wrong answers- we need your candid assessment for this question to be helpful..

Unable to Meet Standards Consistently						**Able to Meet Standards Consistently**	**No Standards Exist**
1	2	3	4	5	6	7	( )

1. The appearance of the hospital's physical facilities, equipment, personnel, and communication materials.

1 2 3 4 5 6 7 ( )

2. The ability of the hospital to perform the promised service dependably and accurately.

1 2 3 4 5 6 7 ( )

3. The willingness of the hospital to patients and provide prompt service.

1 2 3 4 5 6 7 ( )

4. The knowledge and courtesy of the hospital's employees and their ability to convey trust and confidence.

1 2 3 4 5 6 7 ( )

5. The caring, individualized attention the company provides its customers.

1 2 3 4 5 6 7 ( )

Appendix C. 5. : Statements to Measure Gap 4

Directions: Salespeople, advertising, and other company communications often make promises about the level of service a company will deliver. For each feature below, we want to know the extent to which you believe that your hospital and its employees deliver the level of service promised to patients. Circle the number that best describes your perception.

Unable to Meet Promises Consistently						**Able to Meet Promises Consistently**
1	2	3	4	5	6	7

1. The appearance of the hospital's physical facilities, equipment, personnel, and communication materials.

1 2 3 4 5 6 7

2. The ability of the hospital to perform the promised service dependably and accurately.

1 2 3 4 5 6 7

3. The willingness of the hospital to patients and provide prompt service.

1 2 3 4 5 6 7

4. The knowledge and courtesy of the hospital's employees and their ability to convey trust and confidence.

1 2 3 4 5 6 7

5. The caring, individualized attention the company provides its customers.

1 2 3 4 5 6 7

Appendix C. 6. : Statements to Measure Antecedents of Gaps 3 & 4

Directions: Listed below are a number of statements intended to measure your perceptions about your hospital and its operations. Please indicate the extent to which you disagree or agree with each statement by circling one of the seven numbers next to each statement. If you strongly disagree, circle 1. If you strongly agree, circle 7. If your feelings are not strong, circle one of the numbers in the middle. There are no right or wrong answers. Please tell us honestly how you feel.

Strongly Disagree						**Strongly Agree**
1	2	3	4	5	6	7

1. I feel that I am part of a team in my company.

1 2 3 4 5 6 7

2. Everyone in my company contributes to a team effort in servicing customers.

1 2 3 4 5 6 7

3. I feel a sense of responsibility to help my fellow employees do their jobs well.

1 2 3 4 5 6 7

4. My fellow employees and I cooperate more often than we compete.

1 2 3 4 5 6 7

5. I feel that I am an important member of this company.

1 2 3 4 5 6 7

6. I feel comfortable in my job in the sense that I am able to perform the job well.

1 2 3 4 5 6 7

7. My company hires people who are qualified to do their jobs.

1 2 3 4 5 6 7

8. My company gives me the tools and equipment that I need to perform my job well.

1 2 3 4 5 6 7

9. I spend a lot of time in my job trying to resolve problems over which I have little control. (-)

1 2 3 4 5 6 7

10. I have the freedom in my job to truly satisfy the patients' needs.

1 2 3 4 5 6 7

11. I sometimes feel a lack of control over my job because too many patients demand service at the same time. (-)[1]

1 2 3 4 5 6 7

12. One of my frustrations on the job is that I sometimes have to depend on other employees in serving patients. (-)

1 2 3 4 5 6 7

13. My supervisor's appraisal of my job performance includes how well I interact with customers.

1 2 3 4 5 6 7

14. In our hospital, making a special effort to serve patients well does not result in more pay or recognition. (-)

1 2 3 4 5 6 7

15. In our hospital, employees who do the best job serving their patients are more likely to be rewarded than other employees.

1 2 3 4 5 6 7

16 The amount of paperwork in my job makes it hard for me to effectively serve patients. (-)

1 2 3 4 5 6 7

17. The company places so much emphasis on selling that it is difficult to serve patients properly. (-)

1 2 3 4 5 6 7

18. What patients want me to do and what management wants me to do are usually the same thing.

1 2 3 4 5 6 7

19. My company and I have the same ideas about how my job should be performed.

1 2 3 4 5 6 7

20. I receive a sufficient amount of information from management concerning what I am supposed to do in my job.

1 2 3 4 5 6 7

21. I often feel that I do not understand the services offered by my company. (-)

1 2 3 4 5 6 7

22. I am able to keep up with changes in my company that affect my job.

1 2 3 4 5 6 7

23. I feel taht I have not been well trained by my hospitasl in how to interact effectively with patients.(-)

1 2 3 4 5 6 7

[1] Statements with a (-) sign at the end are negatively worded and therefore should be reverse-scored (i.e., a rating of 7 should be scored as 1, 6 as 2, 5 as 3, and so on).

24. I am not sure which aspects of my job my supervisor will stress most in evaluating my performance. (-)

1 2 3 4 5 6 7

25. The epople who develop our advertising consult employeess like me about the realism of promises made in the advertising.

1 2 3 4 5 6 7

26. I am often not aware in advance of the promises made in our hospital's advertising campaigns. (-)

1 2 3 4 5 6 7

27. Employees like me interact with operations people to discuss the level of service the hospital can deliver to patients.

1 2 3 4 5 6 7

28. Our hospital's policies on serving patients are consistent in the different offices that service patients.

1 2 3 4 5 6 7

29. Intense competition is creating more pressure inside this hospital to generate new business. (-)

1 2 3 4 5 6 7

30. Our key competitors make promises they cannot possibly keep in an effort to gain new patients. (-)

1 2 3 4 5 6 7

APPENDIX D

QUALITY VISION, QUALITY POLITICS

OF THE HOSPITAL

AND THE

QUETIONNAIRE THEY USE FOR

CUSTOMER SURVEY

Appendix D. 1. New Vision of the Hospital

- Quality of life and happiness of the people are above all for us.

- In Turkey, the first organization that come to mind when one think of health is ours and the one who come to our hospital once always prefers us.

- We give health service using the world's highest information and technology with love, interest, and compassion.

- Our hospital defines the 'quality in health'.

Appendix D. 2. : Quality Politics of the Hospital
(Hastanenin Kalite Politikaları)

Türkiye ölçeğinde ve tıbbın tüm alanlarında, haftada 7 gün, günde 24 saat, güvenilir ve kusursuz, en iyi hizmeti vermek. Temiz ve göze hoş görünür bir hastanede, makul fiyatlarla ve çağdaş ölçüde bir sağlık hizmeti sunmak. Hizmet kalitesini bir yandan tutarlı ve istenilen düzeyde tutarken, bir yandan sürekli iyileştirmek.

İlk seferde doğru teşhis ve tedavide bulunmak. Hastayı mutlu edeck bir sağlık hizmetini, bekletmeden, zamanında ve çabuk vermek. Hastaya sıcak ilgi, sevgi ve saygı gçstermek. Hastayı durumu ve yapılacak işlemler ile ilgili bilgilendirmek. Hastanın menfaatini herşeyin üstünde tutan bir sağlık hizmeti sunmak.

Nitelikli insan gücü çalıştırmak. Hastalarımızın herbiriyle kişisel olarak ilgilenecek sayıda çalışanlara sahip olmak. Çalışanlarımızı mutlu edecek ortamı ve düzeni oluşturmak ve uygulamak. Sevgi'nin maddi, manevi sahipliliğini yaşayan, işleri ilgili bilgiyi paylaşan, birbirlerine sevgi ve saygı gösteren çalışanlarımızın maddi koşullarını iyileştirmek.

Geleceği pilanlamak. Rekabet için yeni sistemler geliştirmek ve tasarlamak. Tedarikçi kalitesini iyileştirmek.

Ulusal ve uluslararası sağlık kuruluşları ile işbirliği içinde olmak.

Genel Müdür

Adı, soyadı:.....Telefon No:.....

İyi günler efendim. Biz Sevgi Hastanesi'nden bağımsız Sevgi Hastanesinin Kalitesini ölçen özel bir kuruluşuz. Hastane'nin daha iyi hizmet verebilmesi için Sevgi hakkındaki eleştirilerinizi öğrenmek amacıyla kısa bir anket yapıyoruz. Şu anda 10 dakika zamanınızı bu anket için ayırabilir miyiz ?

Kabul ettiğiniz için Teşekkür Ederiz.

Sevgi Hastanesi'nin hangi birimine başvurdunuz?

Bolüm : ..... Doktor : .....

Bolüm : ..... Doktor : .....

Bolüm : ..... Doktor : .....

Bolüm : ..... Doktor : .....

Bolüm : ..... Doktor : .....

Sorularımızın çoğunda Sevgi Hastanesi'nin çeşitli hizmetlerine 5 üzerinden not vermenizi istiyoruz. Lütfen notu tamamen kendi kanaatinize, algılayışınıza göre veriniz. Ankete göre 5 pek iyi, 4 iyi, 3 orta, 2 zayıf, 1 çok zayıf demektir.

1. HASTA DANIŞMANI- GENEL

1.1. Telefonla aramış mı?

✓ *Hastaneyi telefonla aradınız mı?* ❑ Evet ❑ Hayır

1.1'in cevabı HAYIR ise 1.5'e geçiniz.

1.2. Santral?: Cevap verme...

✓ ——— *Şimdi lütfen santralin telefona cevap verme hızına 5 üzerinden not veriniz...*

1.3. Santral? Doğru bağlama...

✓ --------- *Santralin sizi doğru yere bağlaması...*

1.4. Resepsiyon?

✓ --------- *Hastane binasına girdiğiniz anda Resepsiyondaki bayanların size gösterdiği ilgiye 5 üzerinden not veriniz...*(Hasta resepsiyona uğramamışsa cevaba X koyunuz.)

2. DANIŞMAN HEKİM?

Sevgi Sağlık Hattı'ndan arayanların sorularına cevap veren, hastaneye gelen hastalar hangi doktora gideceklerini bilmiyorlarsa onlarla konuşup yönlendiren bir danışman doktor var: Dr.Atilla Sekerci. Bu danışman doktorla temasınız oldu mu? ❑ Evet ❑ Hayır (Hayırsa 3'e geçiniz)

2.1. Telefonla mı hastane içinde mi? (Birini veya ikisin birden işaretleyiniz)

✓❑ Telefonla ❑ Hastane içinde ("Telefonla" işaretlenmemişse 2.3'e geçiniz.)

2.2. Telefonda yeterli ilgi?

✓ ——— *Danışman hekimin telefonda size yeterli bilgi vermesi.*

2.3. Hastane içinde yeterli ilgi?

✓ ——— *Danışman hekimin hastanede size gösterdiği ilgi.*

BU SAYFADAKİ 3 ve 4. BÖLÜMLER İLGİLİ HER BÖLÜM İÇİN TEKRAR DOLDURULACAKTIR

3. _____ DOKTOR (.... doktoru diye başlayan sorularda ... yerine bölümün adı konulacaktır. "Gastro doktoru" gibi...)

3.1. Anladı mı?

✓--------- *... doktorunun size gösterdiği ilgi.*

3.2. Anlattı mı?

✓--------- *.... doktorunun şikayetiniz hakkında size verdiği izahat.*

3.3 Teşhis?/ Tedavi?

✓--------..... *doktorunun önerdiği teşhis ve tedavinin yeterliliği.*

(Hasta burada bilemeyeceğini beyan ederse, "*Biz sizin kanaatinizi öğrenmek istiyoruz...*" açıklamasını yapınız. Son seçenek olarak, "*Peki önerdiği teşhis ve tedavi sizi ne derece tatmin etti?*" diyerek 5 üzerinden not alıce etmeye çalışınız.)

3.4. Yeniden?

✓-------- *Tekrar benzer şikâyetleriniz olursa yine ..... doktorumuza gider misiniz? Cevaplar şunlar:*

5) Kesinlikle giderim 4) Galiba giderim 3) Bilemiyeceğim 2) Galiba gitmem 1) Kesinlikle gitmem

3.5. Zamanında?

✓ *Randevu almış mıydınız?* ❑ Evet ❑ Hayır (Hayırsa 4'e geçiniz.)

✓-------- *Şimdi lütfen doktorun yanına girmeden önce sizi bekletip bekletmediğimize not verir misiniz? Hiç bekletmemişsek "Beklemedi" yani 5' çok fazla bekletmişsek Çok zaman yani 1' veriniz. Notumuz kaç?*

4. _____ HASTA DANIŞMANI

4.1. Sevgi/ Saygı?

Sizi kaydeden, faturanızı hazırlayan bankodaki arkadaşlar ve sizi doktorunuza ulaştıran yol gösteren hostes arkadaşlar "hasta danışmanları"dır. Şimdi sıra onların notlarına geldi:

"..... kliniği" yerine kliniğin adı konulacaktır. "Gastro kliniği" gibi.

✓-------- ..... *kliniği hasta danışmanının size gösterdiği ilgi ve saygı.*

4.2. Bilgi?

✓-------- ..... *kliniği hasta danışmanlarının, işlerini bilerek yapması.*

5. _____ LABORATUAR?

✓ *Kan alma bölümü ile temasınız oldu mu?* ❑ Evet ❑ Hayır (Hayırsa 6'ya geçiniz)

5.1. İlgi?

✓-------- *Numune almadaki görevlilerinin ilgisi.*

5.2. Sonuç verme/ Zamanında mı?

✓-------- *Tahlil sonuçlarınızı zamanında alabildiniz mi?*

○ Evet ○ Hayır

5.3. Sonuç verme/ İlgi ?

Tahlil Sonuçlarınızı nereden aldınız ?

○ Hasta Danışmanı ○ Doktor ○ Sonuç Verme Bankosu ○ Telefon ile

Eğer Hasta Sonucunu Sonuç Verme Bankosundan almış ise...

✓-------- *Sonuç verme bankosundaki ilgi.*

5.4. Güven

✔---------- *Sizce Sevgi laboratuarının sonuçları ne derece güvenilirdir?*
(Hasta buraca bilemeyeceğini beyan ederse, "*Biz sizin kanaatinizi öğrenmek istiyoruz...*" açıklamasını yapınız.)

6. TETKİK BİRİMLERİ

(BU BÖLÜM YAPILMIŞ HER TETKİK İÇİN TEKRAR DOLDURULACAKTIR)

✔*Rontgen, ultrason veya başka tetkik birimlerini kullandınız mı?* ❑ Evet ❑ Hayır

✔*Hangi tetkik birimlerini kullandınız?* ❑ US ❑ Rontgen ❑ BT ❑ MR ❑ Eko (Kardiyoloji)
❑ Eforlu EKG (Kardiyoloji) ❑ EEG ❑ EMG ❑ US (Jinekoloji) ❑ Nükleer Tıp

Eğer Hasta birden fazla tetkik yaptırmışsa 6.1 ve 6.2 için birden fazla sayfa doldurulacak.

Hasta tetkik birimlerinin ismini bilmiyorsa açıklayarak bulunuz. ....'de nokta nokta yerine tetkik biriminin adı söylenecek.: "Ultrasonca bekletilmeden tetkik yapıldı", gibi.

Simdi de onların notunu verebilir misiniz?

6.1. Bekleme?

✔——— *... da, tetkik için gereken hazırlık süresi dışındaki hızlı hizmet.*

6.2. Sevgi/ Saygı (Doktor)?

✔——— *...'daki görevli personelin ilgisi.*

6.3. Radyoloji Bankosu ?

işini bilmesi
Sonuç yok!

✔——— *Radyoloji Bankosunda görevli Hasta Danışmanlarının ilgisi.*

7. PARK?

✔*Hastanenin karşısındaki park yerini kullandınız mı?* ❑ Evet ❑ Hayır (Hayırsa 8'e geciniz)

7.1. Sevgi/ Saygı?

✔——— *Park görevlilerinin ilgisi, yardımcı olmaları.*

8. RESTORAN?

Hastane girişindeki Sevgi Kafe'den veya terastaki restorandan yararlandınız mı?
✔❑Hayır ❑ Sevgi Kafe ❑ Restoran (Hayırsa 9'a geciniz.)

8.1. Sevgi/ Saygı

✔--------- *Servisin saygılı yapılması.*

8.2. Temizlik

✔——— *Kafenin ve restoranın temizliği.*

9. GENEL?

Sonlara geldik. Şimdi hastane hakkında bazı genel notlar isteyeceğim...

HASTANIN ÖDEME DURUMU ?
✔❑ Ödemeli ❑ Sigorta ❑ Kurum

9.1. Fiyat?

✔——— *Sevgi Hastanesi'nin fiyatlarını ne derece makul buluyorsunuz ?*
Eğer normal buluyorsanız 5, çok pahalı buluyorsanız 1 şeklinde not veriniz.

9.2. Yeniden?

Simdiki soruya notla değil, okuyacağım cevaplardan biriyle karşılık verir misiniz?
✔---------- Yakınlarınıza Sevgi Hastanesi'ni tavsiye eder misiniz? Cevaplar şunlar:
5) Kesinlikle ederim 4) Galiba ederim 3) Bilemiyeceğim 2) Galiba etmem 1) Kesinlikle etmem.

✔---------- Bir daha sağlık hizmetine ihtiyacınız olursa yine Sevgi Hastanesi'ne gider misiniz?
Cevaplar şunlar:
5) Kesinlikle giderim 4) Galiba giderim 3) Bilemiyeceğim 2) Galiba gitmem 1) Kesinlikle gitmem.

10. ÖZELLİKLE ŞİKAYET?

✔Özellikle şikayetçi olduğunuz ve düzeltilmesini istediğiniz veya olması halinde daha iyi olacağını düşündüğünüz fikirleriniz var mı?

11. ÖZELLİKLE ÖVGÜ?

✔Özellikle memnun kaldığınız Sevgi Hastanesine ait özellik veya takdir ettiğiniz bir eleman var mı?

12. BAŞKA?

✔Başka belirtmek istediğiniz bir konu var mı?

TEŞEKKÜR EDERİZ? SEVGİ HASTANESİ SİZE DAHA İYİ HİZMET VERMEYİ AMAÇLAYAN BİR KURULUŞ. BU NEDENLE BİR İHTİYACINIZ VEYA SORUNUZ OLURSA LÜTFEN ÇEKİNMEDEN SEVGİ HASTANESİ İLE KONTAK KURUNUZ. 119

Anketörün notu:

Reklamcımız ○ ***Kayıp Hasta*** ○

MART 1995 POLİKLİNİK ANKETİ SONUCLARI

Mart ayında hastanemize müracaat eden hastalardan rastgele 285 adedine telefon açılmış ve bunlardan 528 birim değerlendirmesi alınmıştır. Sonuçlar, ilk anketimizin yapıldığı Kasım 1994'e göre son derece olumlu bir gelişmeye işaret etmektedir. Bütün arkadaşlarımızı kutlarız.

Kalite Carpanı= (Tam mutlu olan, yani "5" veren Hasta Sayısı)/ (Toplam Hasta Sayısı) formülüne göre hesaplanmıştır.

Nisan 1995 anket çalışmasına henüz başlanmamıştır.

Mart ayında gerçekleştirilen yatan hasta anket sonuçları ayrıca açıklanacaktır.

Anahtar: TD= Denek sayısı; KÇ= Kalite çarpanı

	Toplam Denek	Kalite Çarpanı
SANTRAL		
Santralın telefona cevap verme hızı	187	0.68
Santralın arayanı doğru yere bağlaması	187	0.81
OTOPARK		
Otopark görevlilerinin ilgi ve yardımı:	89	0.77
RESEPSİYON		
Resepsiyonun hastaya gösterdiği ilgi	267	0.71
DANIŞMAN DOKTOR — Telefonda gösterilen ilgi	2	0.50
DANIŞMAN DOKTOR — Hastanede gösterilen ilgi	15	0.93
RESTORAN — Saygılı servis	106	0.84
RESTORAN — Temizlik	119	0.87
HASTANENİN GENEL DEĞERLENDİRİLMESİ		
Fiyatlar sizce makul mu?	114	0.55
Sevgi'yi yakınlarınıza tavsiye eder misiniz?	286	0.88
Gerekirse yine Sevgi'ye gelir misiniz?	287	0.88

	İlgisi TD	İlgisi KÇ	İş Bilinesi TD	İş Bilinesi KÇ	Ortalama KÇ
1. Banko	226	0.85	213	0.89	0.87
2. Banko	214	0.92	211	0.95	0.93
5. Banko (1. Kat)	84	0.85	83	0.87	0.86
Yatış- Tabucu	7	1.00	7	1.00	1.00
Radyoloji Bankosu	154	0.88			0.88

LABORATUAR:	TD	KÇ
Sonuçların zamanında verilmesi	178	0.98
Kan almadaki görevlilerin ilgisi	176	0.88
Hastanın sonuçlarımıza güveni	144	0.96
Sonuç verme bankosundaki ilgi	51	0.86
KALİTE ÇARPANI ORTALAMASI		0.92

Denek sayısı bazı birimlerde yetersiz.

ETKİK BİRİMLERİ:

	Hazırlık süresi dışında çabuk hizmet TD	Hazırlık süresi dışında çabuk hizmet KÇ	Birimdeki doktorun ilgisi TD	Birimdeki doktorun ilgisi KÇ	ORTALAMA KALİTE ÇARPANI	
EKO	3	0.33	3	0.33	0.33	"
EKG	4	0.75	4	0.75	0.75	"
JUS	0	0.00	0	0.00	0.00	İstatistik'i açıdan anlam teşkil etmemekte
BT	8	0.75	8	0.88	0.81	"
RONTGEN	95	0.87	95	0.86	0.86	✓
US	75	0.92	74	0.88	0.90	✓
MR	11	0.91	11	0.91	0.91	✓
EEG	1	1.00	1	1.00	1.00	"
EMG	2	1.00	2	1.00	1.00	"
NÜK TIP	1	1.00	0	0.00	0.00	İstatistik'i açıdan anlam teşkil etmemekte

	Doktoru-nuz şikâ-yetinizi ye-terince din-ledi mi?		Doktoru-nuz size yeterli bilgi verdi mi?		Teşhis ve tedavi sizce ye-terli mi?		Randevu zamanında gerçek-leşti mi?		Tekrar aynı dok-tora gider misiniz?		ORTALA-MA KALİ TE ÇAR-PANI (5 sorunun ortala-ması)	Hasta nos-tesinin ilgisi		Hasta hostesi-nin işini bilmesi		ORTALA-MA KALİ TE ÇAR-PANI (7 sorunun ortala-ması)
	TD	KÇ	TD	KÇ	TD	KÇ	TD	KÇ	TD	KÇ		TD	KÇ	TD	KÇ	
GASTRO	32	0.94	32	0.94	25	0.80	25	0.88	32	0.97	0.90	31	0.94	31	1.00	0.92
ENDOKRİN	10	1.00	10	0.80	8	0.36	10	1.00	10	0.80	0.89	10	1.00	10	1.00	0.92
KARDİYOLOJİ	36	0.72	36	0.81	30	0.77	34	0.94	36	0.78	0.80	36	0.89	36	0.92	0.83
GÜNDÜZ ACİL	31	0.87	31	0.77	25	0.84	1	1.00	30	0.77	0.85	16	0.63	29	0.93	0.82
PEDİATRİ	34	1.00	34	0.97	34	0.88	25	0.84	34	0.94	0.92	31	0.81	31	0.84	0.89
NÖRCŞİRÜRJİ	32	1.00	32	0.97	27	0.89	26	0.81	32	0.90	0.91	30	0.87	30	0.87	0.90
GENEL CERRAHİ	34	1.00	34	0.97	28	1.00	23	0.87	34	0.94	0.95	34	0.97	34	0.97	0.96
DAHİLİYE	34	0.91	34	0.88	30	0.80	29	0.90	34	0.82	0.86	33	0.88	33	0.91	0.87
DERMATOLOJİ	30	0.97	30	0.93	24	0.92	28	0.71	30	0.90	0.88	29	0.93	29	1.00	0.90
KBB	41	0.95	41	0.93	37	0.92	38	0.74	41	0.88	0.88	41	0.88	41	0.93	0.89
ORTOPEDİ	34	0.91	34	0.85	25	0.80	27	0.93	34	0.79	0.85	33	0.94	33	0.94	0.88
GECE ACİL	31	0.87	31	0.94	29	0.83	4	1.00	31	0.87	0.90	27	0.74	27	0.85	0.87
JİNEKOLOJİ	43	0.88	43	0.91	32	0.91	36	0.72	43	0.90	0.86	43	0.81	42	0.81	0.85
ÜROLOJİ	20	0.85	20	0.85	18	0.83	17	0.82	20	0.80	0.83	19	0.84	19	0.89	0.84
DİYET	10	1.00	10	1.00	9	1.00	5	1.00	10	1.00	1.00	10	1.00	10	1.00	1.00
GÖZ	22	0.86	22	0.86	21	0.86	19	0.95	22	0.86	0.88	17	0.82	17	0.88	0.87
NÖROLOJİ	32	0.94	32	0.88	24	0.92	25	0.80	32	0.90	0.89	32	0.91	32	0.91	0.89
DİŞ	17	0.82	17	0.82	15	0.73	16	0.94	17	0.88	0.84	17	0.94	17	0.94	0.86
TOPLAM	523	0.91	523	0.90	450	0.85	395	0.83	531	0.86	0.87	489	0.88	491	0.93	0.88

	Hazırlık süresi dışında çabuk hizmet		Birimdeki doktorun ilgisi		ORTALAMA KALİTE ÇARPANI
	TD	KÇ	TD	KÇ	
EKO	3	0.67	3	1.00	0.82
EKG	5	0.75	5	0.80	0.77
JUS	0	0.00	0	0.00	0.00
BT	5	1.00	5	1.00	1.00
RONTGEN	48	0.90	50	0.90	0.90
US	44	0.86	45	0.87	0.86
MR	11	1.00	11	1.00	1.00
EEG	3	1.00	3	1.00	1.00
EMG	0	0.00	0	0.00	0.00
NÜK TIP	2	1.00	2	1.00	1.00

ŞUBAT- MART KARSILASTIRMASI

	Şubat 5	Mart 5	Şubat 7	Mart 7
GASTRO	0.94	0.90	0.93	0.90
PEDİATRİ	0.90	0.92	0.93	0.71
GENEL CERRAHİ	0.89	0.95	0.92	0.71
NÖRCŞİRÜRJİ	0.93	0.91	0.92	0.69
JİNEKOLOJİ	0.93	0.86	0.91	0.84
ENDOKRİN	0.89	0.89	0.90	0.82
ORTOPEDİ	0.88	0.85	0.90	0.70
DAHİLİYE	0.87	0.86	0.87	0.71
GÜNDÜZ ACİL	0.82	0.85	0.85	0.70
KARDİYOLOJİ	0.83	0.80	0.84	0.77
NÖROLOJİ	0.82	0.89	0.84	0.84
KBB	0.83	0.88	0.83	0.88
ÜROLOJİ	0.83	0.83	0.82	0.80
DERMATOLOJİ	0.82	0.88	0.82	0.71
GECE ACİL	0.71	0.90	0.75	0.88
DİŞ	0.81	0.84	0.79	0.86
DİYET	0.88	1.00	0.91	1.00
GÖZ	0.93	0.88	0.92	0.87
ORTALAMA	**0.90**	**0.87**	**0.91**	**0.88**

Şubat 5, Mart 5: 5 Soru sonucu

Şubat 7, Mart 7: 7 Soru sonucu (Hostes ve danışmanlar dahil)

	Şubat	Mart		Şubat	Mart
FİYATLARIMİZ	0.62	0.55	LABORATUAR	0.92	0.9
SANTRAL	0.79	0.74	RONTGEN	0.90	0.9
OTOPARK	0.83	0.77	US	0.86	0.9
RESEPSİYON	0.69	0.71	MR	1.00	1
RESTORAN	0.86	0.85			